



# Total Resolution at 1 Foot Candle.

# Introducing the world's most advanced electronic finder system.

This is the system uniquely designed and precision engineered by CSC to meet the exacting requirements of today's cinematographer. Space-age solid state components supply power to zinc telluride video receiver tubes

to produce a sensitivity that surpasses every film rating on the ASA scale. Incredible? Yes! But isn't this what you've come to expect from Camera Service Center?

To use the system is to save time and money. Hook up to a video recorder and pre-edit takes. Check operating conditions before you roll—lighting, framing, focus. Create remote control set-ups where using an operator is impractical or unsafe. Reduce on set traffic by moving non-essential personnel to nearby viewing monitors. You're limited only by your own imagination.

Call or write for technical specifications and for details on rentals/sales. CSC electronic viewfinder systems are available for the cameras pictured and for most 16mm cameras.



#### camera service center, inc.

sales affiliate • CAMERA SALES CENTER CORPORATION 625 West 54th Street, New York, N.Y. 10019 / 212/757-0906

### TO IMPROVE NEW YORK FILMMAKING, YOU'VE GOT TO HAVE 'VISION.

**Panavision.** Once you've said it, you've said it all in 35mm. Cameras. Lenses. Systems. The works.

Starting with the new ultra-versatile, self blimped Panaflex.®A camera so advanced, it's a generation ahead of its time. A camera so light and natural to use, you'll have trouble remembering it's a "35," and it's studio silent! Like Panavision® cameras,
Panavision lenses have rapidly become the industry's standard, their
quality and versatility is world famous
with exotic new additions appearing
regularly.

Let us show you more about Panavision. As the exclusive East Coast Panavision distributor, we invite you to visit our



9 general camera corporation 471 Eleventh Avenue, New York, N.Y. 10018 (212) 594-8700

# check and double check

There's a special meaning in these two check marks: Check and double check. They sum up our business philosophy. They're so vital to our operation that they are a part of our corporate signature. They serve an important purpose: To remind you that anything you rent from Victor Duncan is as clean and mechanically perfect as skilled technicians can make it. To guarantee flawless performance. To guard against costly production tie-ups. And to keep you coming back to Victor Duncan.

the check and double check people



VICTOR DUNCAN, INC.

Rentals, Sales, Service

200 East Ontario, Chicago, IL 60611 (312) 321-9406 2659 Fondren, Dallas, TX 75206 (214) 369-1165 11043 Gratiot, Detroit, MI 48213 (313) 371-4920

# Cinematographe of Motion Picture Photography and Production Techniques

The American Society of Cinematographers is not a labor union or a guild, but is an educational, cultural and professional organization. Membership is by invitation to those who are actively engaged as Directors of Photography and have demonstrated outstanding ability. Not all cinematographers can place the initials A.S.C. after their names. A.S.C. membership has become one of the highest honors that can be bestowed upon a professional cinematographer, a mark of prestige and distinction.

FEBRUARY, 1978

VOL. 59, NO. 2

Herb A. Lightman editor

Three Tyler editorial assistant

**Barry Day** production control

Patty Caughlin circulation
Barbara Prevedel accounting

Gabrielle de Ganges layout assembly

Contributing Editors
David Samuelson
Sidney B. Solow
Anton Wilson

Editorial Advisory Committee Lee Garmes, Chairman Lester Shorr, Vice-Chairman

Lloyd Ahern Howard Anderson, Jr. Charles G. Clarke

Stanley Cortez George Folsey Winton Hoch

Milton Krasner Ernest Laszlo

Sam Leavitt William Margulies Richard Moore

Owen Roizman

Editorial—Advertising— Business Offices 1782 North Orange Drive Hollywood, Calif. 90028 (213) 876-5080 FEATURE ARTICLES

142 The Photography of the Film Called "F.I.S.T."

146 Filming "HUICHOLE: PEOPLE OF PEYOTE"

152 The Mind Behind "CLOSE ENCOUNTERS OF THE THIRD KIND"

156 An American Film Institute Seminar with Ralph Woolsey, ASC—Part I

160 A Unique New 35mm P.O.V. Helmet Camera System

186 The VIth Tehran International Film Festival

190 "THE WIZARD OF OZ" and the Golden Era of the American Musical Film

192 Awards of the VIth Tehran International Film Festival

193 The VIth Tehran International Film Festival in Retrospect

DEPARTMENTS

116 What's New

124 Questions & Answers

128 Cinema Workshop

134 The Bookshelf

194 Industry Activities

ON THE COVER: A young Huichole Indian, in his native village high in the Sierra Madre Mountains of Mexico, secures the feathers on an arrow for a scene from "HUICHOLE: PEOPLE OF PEYOTE", feature documentary on a tribe of people who are direct descendants of the ancient Aztecs.

AMERICAN CINEMATOGRAPHER, established 1920, in 59th year of publication, is published monthly in Hollywood by ASC Holding Corp., 1782 North Orange Drive, Hollywood, California 90028. U.S.A. SUBSCRIPTIONS: U.S. \$9.00; Canada, foreign, including Pan-American Union, \$10.00 a year (remit International Money Order or other exchange payable in U.S.). ADVERTISING: rate card on request to Hollywood office. CHANGE OF ADDRESS: notify Hollywood office promptly. Copyright 1978 ASC Holding Corp. Second-class postage paid at Los Angeles, California.

# CLEAN answer prints from 7247 A&B Negatives

Take advantage of the excellent quality of 7247 negative without the fear of dirt, scratches, and cinch marks.

Du Art's unique computer system\* of negative handling and timing keeps your negative in brand-new condition—

No Notches...No Metallic Tabs...Nothing touches your negative.

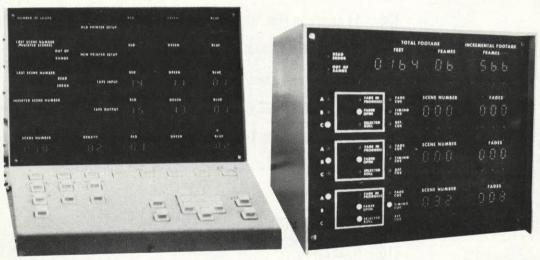
The proof is in the spotless condition of the answer print. But don't just take our word for it. Try it! You'll agree, there's nothing in the industry like it.

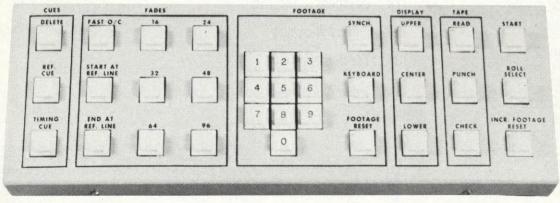
Call Bob Smith for further information.

\*Pat. Pending



#### the CLEAN way to 7247 answer prints

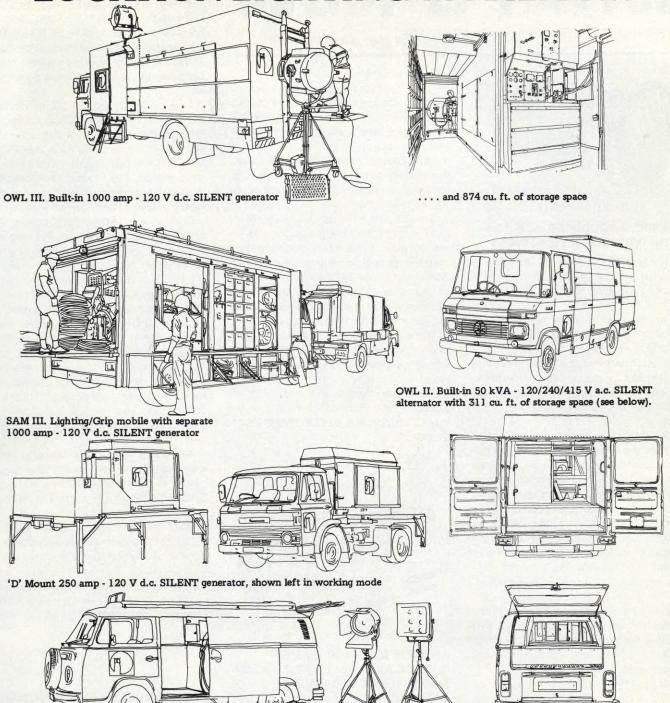




Now in our 53rd year

Du Art Film Building, 245 W. 55th St., New York, N.Y. 10019 (212) PL 7-4580

#### LOCATION LIGHTING MOBILITY...



OWL I. Built-in 15 kW - 120/240 V a.c. SILENT alternator with 144 cu. ft. of storage space

#### ...depends on having the right vehicles and equipment. And the right personnel.

Here at Southern we have a complete range of specially designed vehicles with and without built-in generators/alternators, and with enough carrying space for all lighting and grip equipment. Our enthusiastic technicians are the very best.

So, whether you're planning a one-day commercial, a tight budget 16mm documentary or a major overseas production, we have exactly the generator/alternator/lighting/vehicle package you need. Phone Geoff Smith or Graham Harrington on (01) 452 5477/8/9.

#### SOUTHERN LIGHTING ASSOCIATES Ltd

112 Cricklewood Lane · Cricklewood · London NW2 2DP · Tel: (01) 452 5477 · Telex: 21430 · Cables: Samcine London A Member of the Samuelson Film Service Group of Companies

### WHAT'S NEW

IN PRODUCTS, SERVICES AND LITERATURE



#### AGE INC. INTRODUCES NEW 10:1 ZOOM DIRECTOR'S VIEWFINDER

The new Model Mark IV 10:1 Zoom Director's Viewfinder has been announced by Alan Gordon Enterprises Inc.

After several years of research and development, AGE Inc. optical and mechanical engineers have designed an instrument to meet the many needs of the film and TV director and cameraman working in 35mm and 16mm formats, according to Grant Loucks, AGE Inc. president.

The Mark IV features a zoom range of 10:1. In the 16mm format, the effective range is from 12mm to 120mm. In 35mm it is from 25mm to 250mm. Other features include direct reading scale in lens focal length, optical quality coated glass, lightweight construction (the viewfinder weighs only 13 ounces), focusing eyepiece, smooth zoom movement patterned after camera zoom lenses, precise construction and simple operation.

"The new Mark IV viewfinder is such a radical improvement over those currently on the market that I'm sure it will fast become the standard working tool for all professional directors and cameramen," Loucks said.

For more information, write AGE Inc., 1430 Cahuenga Blvd., Hollywood, CA 90028.

#### PRC OF AMERICA'S SUPER-8 1200-FOOT PLASTIC REEL PROVIDES MORE THAN AN HOUR OF UNINTERRUPTED SHOWING

PRC of America's Super-8 1200-foot plastic reel will allow the screening of up to 80 minutes of film without interruption on a Super-8 reel. The extended length more than doubles the amount of time films currently shown on most 8mm reels can be run without needing a reel change. The most common home movie reels are 400 feet and offer less than 30

minutes of uninterrupted showing.

The 1200-foot plastic reel, the first of its kind to be manufactured in the United States, was recently introduced by PRC of America, innovators in packaging/handling equipment for the audio/visual media. Though primarily for home use, the reel is suited for commercial and industrial purposes. The standard color for the reel is blue.

As with all PRC of America Plio-Magic® reels, the life-span is longer than comparable metal reels because the plastic is corrosion-resistant and will not crimp, rust of dent. Additionally, because of its lightweight plastic, the reel is less expensive to ship and users can expect the reels to pay for themselves after only a few shipments. Although lightweight, they are made of sturdy high-impact resins with a case hardened steel insert to resist wear and tear.

For further information, contact PRC of America, 640 South Commercial Avenue, Carlstadt, N.J. 07072. Phone (201) 933-9125.



#### ALL-NEW MNC-71CP ENG/EFP CAMERA AVAILABLE FROM CINEMA PRODUCTS CORPORATION

Cinema Products Corporation announces the availability of the all-new MNC-71CP—a lightweight, fully self-contained ENG/EFP camera of such quality and reliability that it is covered by the standard Cinema Products one-year warranty (unprecedented in the broadcast industry)!

"As our track record with the CP-16 shows," says Ed DiGiulio, President of Cinema Products Corporation, "no one understands better than we do how vital it is for the TV-news cameraman to have a reliable camera to work with."

Manufactured by NEC, Japan's largest manufacturer of broadcast equipment, the MNC-71CP was designed from the start to be used as an

ENG camera as well as a broadcastquality, versatile field production camera (with sophisticated remote production capabilities, including the ability to balance the MNC-71CP to match the colorimetry of other cameras in the field and in the studio, external genlock, master pedestal control, servo-iris control, etc.).

Extensive use of LSI micro circuits developed uniquely by NEC dramatically reduces the number of individual components in the camera. As a result, the MNC-71CP is significantly more stable in performance, 7 to 14 times more reliable in circuit operation, as well as considerably lower in its power consumption.

Outstanding features and options include: use of Saticon® or Plumbicon® 2/3" tubes, as desired; high-transmittance prism optics (maximum aperture f/1.4); built-in linear matrix for highfidelity in tracking colors from high-to-low light levels; three-position gain control (6 to 12 dB additional gain for greater flexibility in boosting for extremely low light levels); signal-to-noise ratio -51 dB: automatic white and black balance circuits; fast set-up facility for converging the camera; complete accessibility of circuit boards (no module extender required) and pickup tubes for easy maintenance.

Also available is a full range of options and accessories enhancing the capabilities of the MNC-71CP as an ideal ENG/EFP camera for battery or AC operation.

MNC-71CP prices start at \$32,900.00. Cinema Products is the exclusive distributor of the MNC-71CP throughout North America. For further information, please write to: Cinema Products Corporation, 2037 Granville Ave., Los Angeles, CA 90025. Tel: (213) 478-7711.

### PLS ANNOUNCES NEW MINIATURE SUPER-STRENGTH QUARTZ PHOTO FLOODLIGHT

Packaged Lighting Systems of Walden, New York 12586 has recently announced the development of a dramatic new miniature floodlight. The lighting source is Quartz, for which PLS is well known

Physical size of the new light is only a surprising 2½"x2½"x4", and is supplied with a versatile yoke which permits stand, light bar, ceiling or wall mounting. It can also be ordered with a threaded ½x20 stand adapter that has a ball swivel and locking device in lieu of the yoke.

Lamps utilized are either 250 Watt Continued on Page 207



**S** ignal dropouts, or "dead spots," those unpredictable areas where two reflecting R.F. signals from a cordless transmitter cancel each other out at the receiver producing a momentary loss of audio called a "hit," are no longer the bane of cordless microphone systems with the introduction of Swintek's unique accessory Mark 9 Dual Antenna Diversity System.

What makes the Swintek Mark 9 Diversity System unique is that it eliminates the weak points of "switching-type" diversity systems by *combining* rather than *switching* the outputs from two antennae, providing an *increase* in signal strength and not a loss, as experienced in switching-type diversity systems. This is accomplished by feeding the output signal into a special phase linear amplifier designed to provide a minimum of 3 Dbs of additional signal gain input for up to *eight* receivers on different frequencies without inter-channel interference or any appreciable increase in noise. Unlike other diversity systems, the Swintek Mark 9 requires only one receiver per channel, thus greatly reducing the cost of the system.

The versatile Mark 9 Diversity System is an accessory you should not be without as it can be used with *any* brand V.H.F. cordless microphone system. It offers unequaled economy, portability, reliability and, best of all, Swintek performance-proven quality.

For more information and detailed specifications on the new Swintek Mark 9 Dual Antenna Diversity System, call or write Frank Kelly at:



NOTICE — All Swintek transmitters have been type-accepted under FCC rules Part 74 and Part 91.

# YOU NEVER HAD IT SO EASY.

The things you're asked to do! Now that people have discovered how valuable and flexible video can be, there's no limit to the things they want you to do with it. Which creates some terrific opportunities...and more than a few production problems as well. At Cine 60, we're specialists in designing new products to help you get more of the former. With less of the latter.

Take power, for instance. Our rechargeable Powerbelts mean you *can* take it with you. More ampere-

hours than ever before. Evenly distributed around your waist to give you the same kind of mobility TV film cameramen have relied on for years. Our fast-charge versions are at full capacity in just one hour,

to give you more shooting and less waiting. 

For more light on the go, compact Cine 60 Sun Guns fill the bill. Color-balanced for video, they give you lots of fresnel-soft lumens in the smallest spaces. Plus wide angle and focusing, too. 

And if you prefer your Sun-Gun power packaged differently, we can give you

Cine 60 NiCad reliability in a Powerpak/Sun Gun combination. □Our rechargeable Powerpaks are also available separately. In a variety of

sizes, voltages and capacities to power just about any-

thing you have in mind. Video. Audio. You-name-it. Just slip it on your belt or into a pocket... and go! While our rugged, reliable power systems take a load off your mind, we can take a load off your shoulders, as well. With a complete line of comfortable shoulder

pods and body braces that let you concentrate on what you're shooting...instead of your aching sacroiliac. Whatever the configuration of your camera, we've got a pod to match. 

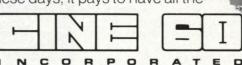
Cine 60 has a lot of other valuable tools to make life easier for video people. Like our

Snaplok, to let you snap-on, snap-off cameras and other equipment from tripods, stands, pods, etc.—in less time than this sentence took to read. Plus suc-

tion mounts, compact quartz lighting... and that's just the beginning. With all

the things you're asked to do these days, it pays to have all the

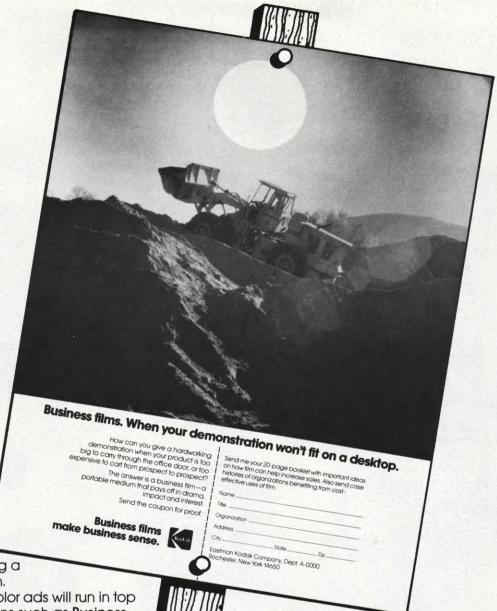
help you can get. Why not call or write for our catalog today?



Film Center Building/630 Ninth Avenue New York, N.Y. 10036/Tel: (212) 586-8782

SEE US AT BOOTH # 1002, LAS VEGAS N.A.B.

### We're campaigning for you.



We're launching a national campaign.

Five different color ads will run in top business publications such as **Business**Week and Fortune telling your prospects that business films can be a big help to them.

And we're documenting what we say by distributing a 20-page booklet citing case histories that relate to specific fields and problems.

Our ads will reach many of your clients and motivate them to take advantage of your services and talents. Get the full impact of our efforts. If you are a nontheatrical producer, write on your letterhead for our Business Films Make Business Sense Kit which contains posters, folders, postcards, a brochure and

a market profile for you to use to convince customers that business films add drama and interest to a business presentation.

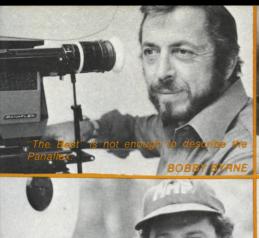
Add your know-how to ours. Write today to Motion Picture and

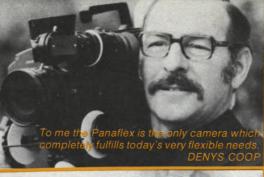
Audiovisual Markets Division, Dept. 640, Eastman Kodak Company, Rochester, N.Y. 14650.





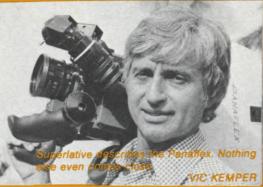




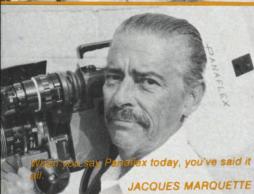


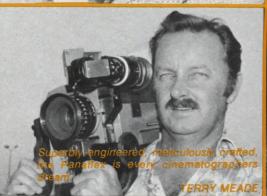


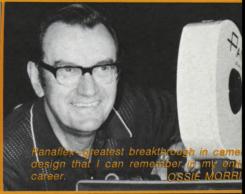


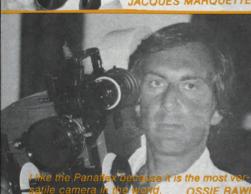




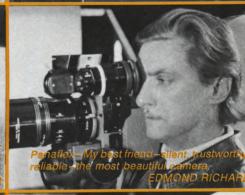


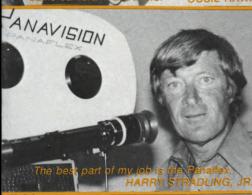


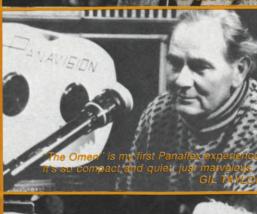


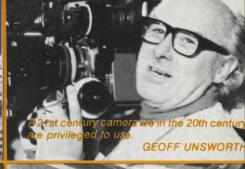


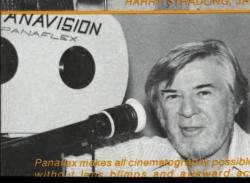
















# when you come to deluxe, deluxe comes to you .... in venice, california



Cinematographer Tak Fugimoto and director Alan Rudolph on location in Venice, California, with Drake Woodworth and Mike Crane of Deluxe during the filming of the Robert Altman production of "REMEMBER MY NAME."

with

when you have good people working for you, it shows.

LET US IMPROVE YOUR IMAGE . . .

#### de luxe laboratories

A DIVISION OF DELUXE GENERAL INCORPORATED

Hollywood: .1546 North Argyle Ave., Hollywood, Ca. 90028 (213) 462-6171 New York: 630 Ninth Avenue, New York, New York 10036 (212) 489-8800



#### THANK YOU, IT'S BEEN A VERY GOOD YEAR.

Columbia Pictures TV Feature

"LAST HURRAH"

Exec. Producer: Carroll O'Conner Terry Becker Frank Levy Mike Wise

Dir. of Photography

Gerald Finnerman ASC

Samuel L. Bronkowitz Feature

**'KENTUCKY FRIED MOVIE"** 

Exec. Producer: Kim Jorgensen Producer Robert Weiss Dir. of Photography: Steven Katz Director John Landis Prod. Manager: Jim Bissell

'THE GREAT AMERICAN GIRL ROBBERY"

Exec Producer Bill Asco Chuck Russell Director Jeff Werner Dir of Photography Paul Ryan Prod Manager Chuck Russell

United Artists Feature

"ANOTHER MAN ANOTHER CHANCE"

Producer: George Dancigers Producer Alexandre Mnouchkine Prod. Manager: Hal Klein

Dir of Photography Jacques Le Francois (France) Stanley Cortez ASC (U.S.) Director: Claude Lelouch

Wildfire Production Feature

"JIMBUCK"

Producer Andrei Krakowski Allan Buckhantz Dir of Photography Charles Carrell

Prod. Manager: Larry Kostroff

Columbia Pictures TV Feature TO KILL A COP

Exec Producer David Gerber Producer Jim Brown Dir of Photography

Gayne Rescher ASC Gary Nelson

Mar Vista Productions Feature "LAST OF THE COWBOYS"

Exec. Producer: Michael Leone

Producer: Allan F. Bodoh John Leone Dir. of Photography.
Edward Brown Sr. ASC
Prod. Manager: Jesse Corallo

Martin Tahse Feature

"VERY GOOD FRIENDS" Producer Martin Tahse

Richard Bennett Dir. of Photography: Bob Collins Prod. Manager: Jerry Kisker

Columbia Pictures TV Feature

'ZEIGFIELD THE MAN & HIS WOMEN"

Co-Producers: Buzz Kulik Mike Frankovich Dir. of Photography: Gerald Finnerman ASC rector: Buzz Kulik

"THE LAST WALTZ"

Exec. Producer: Johnathon Taplin Robbie Robertson Dir. of Photography: Michael Chapman Martin Scorsese Prod Manager Melvin D Dellar

Cal-Am/Atilla Films. Ltd. Fer

**'THE COP WHO PLAYED GOD"** 

Joseph Laird, Jr. Kenneth J. Fisher Assoc. Producer: Steve Bono

Prod Supervisor Kenneth A. Yates Jack Kindberg Prod Manager Dir of Photography Gary Graver

Columbia Pictures TV Feature "LAST OF THE GOOD GUYS"

Jay Daniel Dir. of Photography: Emmet Bergholz Theodore J. Flicker

The Movie Machine Feature "THE HAPPY HOOKER GOES TO WASHINGTON"

William A. Levey Director William A Level Dir. of Photography: Robert Caramico

Columbia Pictures TV Feature

Exec. Producer David Gerber Bill Driskill Jim Brown Dir of Photography Gerald Finnerman ASC

Barry Shear

Arachnid Productions Feature

KINGDOM OF THE SPIDERS"

Jeff Sneller Dir. of Photography: John Morill Bud Cardos

Prod. Manager: Larry Kostroff

Cal-Am/Harlequin Production Feature

Exec. Producer: Joseph R. Laird Kenneth J Fisher David Winters Director

Prod. Manager: Arthur R. Botham

VARIOUS WIDE WORLD OF SPORTS

Production Company ABC Sports Dir of Photography: Don Shapiro

Videotape Show

"DICK CLARK'S GOOD OLD DAYS"

Producer: Dick Clark Director Jeff Margolis Lighting: Jeff Chang

Videotape Show

"DAVID SOUL & FRIENDS"

Producer: Dick Clark Director Perry Rosemont Lighting: Jeff Chang

COLUMBIA PICTURES TV SERIES

Robert Moreno ASC POLICE WOMAN Emmett Bergholz POLICE STORY FANTASY ISLAND Al Francis ASC

Gerald Finnerman ASC

Harry May TABITHA Richard Kelley ASC Gerald Finnerman ASC

> RENTALS, SALES AND SERVICE

(213) 461-4794

1037 N. Sycamore Avenue, Hollywood, Calif. 90038.

**CAMERAS, LIGHTING AND GRIP EQUIPMENT** 

Igo Kanter "THE LOU GRANT SHOW"

Columbia Pictures Television

Robert Caramir

90 Minute Sper THE CAPRA YEARS"

Al Francis ASC Charles Wheeler ASC Travers Hill

Telefilm/Lajon Pilot

6

Carl

free

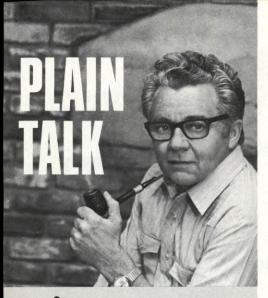
rental

**'WELCOME ABOARD'** 

Exec. Producer: Richard Arlett Buck D'Amore Producer Director Larry Applebaum Dir. of Photography: Peter Salim

'RICK NELSON SPECIAL"

Producer: Hackford & Litman Director: Alan Muier Lighting, Jeff Chann



### by J. Carl Treise

### "The one thing no processor manufacturer talks about"

I've read a lot of film processor ads and haven't found any manufacturer who's willing to say how long it takes to install his unit and get it working.

It's not hard to guess why.

The usual installation often takes up to 3 or 4 weeks and can cost a bundle.

So a man would have to be a fool to bring the subject up, right? — Wrong.

I'm more than happy to talk about it.

Any processor that's any damn good should be adaptable enough to be installed in a hurry. In fact, we'll position a unit, connect systems, and have it working in 2-5 days, depending on its size.

If you think our customers don't love us for it, guess again.

There's no foot-dragging. We're in and out before they know it, and they're back in operation, making money again!

These are important things to consider (— which a lot of folks don't do). And they're every bit as much a cost factor as the price of the processor itself.

When you buy a film processor, look at the whole "picture." It makes a helluva lot of sense to buy a quality unit that costs a bit more but can be installed in a fraction of the normal time. The money you save is your own, and that ain't hay!



1941 FIRST ST. ● SAN FERNANDO, CALIF. 91340 PHONE: (213) 365-3124

### **QUESTIONS & ANSWERS**

Conducted by CHARLES G. CLARKE, ASC. and WINTON HOCH, ASC.



(Inquiries are invited relating to cinematographic problems, Address: Q. & A., AMERICAN CINEMATOGRAPHER, P.O. Box 2230, Hollywood, Calif. 90028.)

Since I've recently read articles in back issues of American Cinematographer relating to "Traveling Matte Photography and the Blue Screen System", I've become interested in finding a traveling matte process that doesn't require the enormous amount of printing procedures and separations that the color difference blue screen process demands. There is a basic principle in the color difference system that I think could be incorporated into a much simpler process. In the standard process, a female matte of the foreground action (which has been filmed in front of a blue screen) is obtained by bi-packing a positive print of this action with a negative print of the same action, with both having clear background areas; the task of producing a positive and a negative from the same strip of film while retaining a clear background in both is the real labor of the process. Obviously, a negative from this bi-pack will produce a clear foreground action area from the negative and positive complementing each other during printing, and the background turns black.

I believe a set of complementary negatives and positives could be produced with clear background areas without color separations. If the foreground action was filmed against a medium grey background, then a positive from the original negative could be printed to have a similar density in the background. During the bi-pack, the foreground would go white and the background would be some tone of grey. Taking this "intermediate matte" and printing it with hi-contrast positive film, a male matte could be obtained with suitable black and white densities. Careful steps would have to be taken during the foreground action photography to keep the light level of the foreground either above or below the medium grey of the background. This would ensure a suitable contrast between elements at the "intermediate matte" stage so that success would happen with the hi-contrast matte.

I plan to experiment with this idea in 16mm color. Perhaps the final mattes obtained by this process would be slightly fogged in the background areas which would act as a neutral density filter over the background plate, but this could be compensated for by shooting the backgrounds a stop brighter to print through the fogged mattes.

I would appreciate any ideas or advice that you have on this concept.

Your thinking regarding the attainment of a matte of the foreground information does not recognize the reasons for the current means of producing a satisfactory matte. First of all, you must consider the fact that this matte must have either density or no density in both the blacks and the whites. Carry this thought further and think about placing a gray scale in front of the neutral backing. In order to separate the white from the backing, the backing must be in the order of two stops brighter than the key on the gray scale. This produces an untenable condition in that the ambient light reflected from the background screen will flatten the foreground lighting to an unacceptable degree.

It may interest you to know that at the present time there are two electronic printers being completed that will use high resolution video tubes. This will make it possible to make a film to film transfer with sufficient resolution to be used in large screen projection. This will make it possible to use the TV chromokey system on motion picture traveling mattes.

The advantage of this system is that the amount of separation needed using the electronic chain is approximately one tenth the amount needed in film to produce usable mattes.

The electronic system also provides a viewable composite before the assembly including the facilities of instant adjustment of the contrast and color content of each part of the composite plus the sharpness of the matte edge.

Bill Abbott

While viewing the new film "CLOSE ENCOUNTERS OF THE THIRD KIND", I noticed in Vilmos Zsigmond's cinematography a kind of prismatic double-image around various objects and people in the scenes. Continued on Page 214







Lowel Omni-light is the product of a five year program to create the ideal 650 watt location light. A focussing instrument engineered for compatibility with other Lowel equipment. A system to meet the most exacting professional requirements.

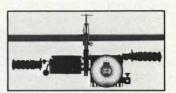
Omni-light is remarkably small. But its versatility and performance are sensational. You can convert Omni in seconds, without tools, as your needs change or the job requires. From a hard light to a soft light. From news coverage to feature production. From fast moving documentary to table top shooting. From battery power to wall outlet. From 120 volts to 220/ 240 volts. From hand operation to stand operation. From a focussing light to a high-intensity instrument. It's hard to believe Omni is only one light.

The secret is Omni-light's remarkable component system. You already own part of it if you have Lowel Tota-lights. But even without accessories, the Omni-light is a truly remarkable unit.



# small ( sensation

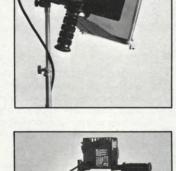


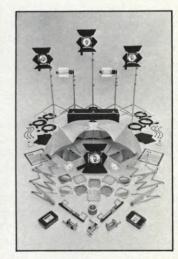










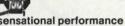




The Solo kit (shown at bottom right) is the most complete of the Omni-kits. The four Omni-lights and 2 Tota-lights travel and work together with inspired compatibility. They even share some of the same components. Everything fits neatly inside a 28" x 18" x 9" case.

There are four other Omni-kits Three even use smaller cases only 6" deep. Yet all have space for additional equipment. We even provide customizing information. An essential part of Lowel lighting systems is our first hand knowledge of location work. Professional experience that assures phenomenal versatility and performance.

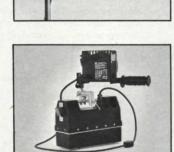
The small sensation is performing now at authorized Lowel Dealers. For a brochure, contact us. Lowel-Light Manufacturing Inc. 421 W 54th St. NY, NY 10019 212-245-6744 West Coast: 3407 W. Olive Ave. Burbank, Ca. 91505 213-846-7740. Lowel Omni-light, Lowel Tota-light are trademarks of Lowel-Light Manufacturing Inc.

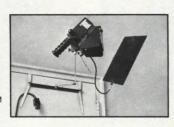


Omni-light's range of focus depends on the lamp and reflector used. Its minimum ratio exceeds 6:1. And Omni's maximum is an unprecedented 11:1. Full spot intensities are exceptionally high. Beam patterns are extremely even and continuously variable hrough a responsive directdrive mechanism.

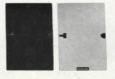
Omni-light fits on standard %" studs, yet locks wobble-free on smaller ones. All four doors have extending wings. Doors are instantly removable with 1/4 turn asteners, but can remain atached for kit storage. Two Omniights stack on one stand, without accessories. One hand can nold and focus the unit.

Double wall construction and generous convection cooling ensure maximum life for lamps and nternal wiring. Omni-light is built for sensational performanceeven after years of hard use.











# CINEMA WORKSHOP By ANTON WILSON

#### **CAMERA SHUTTERS II**

The shutter opening of a motion picture camera may not be the classical 180 degrees. To conform to various design considerations the shutter may open for only 140 degrees or as much as 280 degrees. In addition, the shutter can take many strange forms and shapes. FIG-URE I depicts the most common focal plane shutter. This type of shutter is used by Bell & Howell and Bolex, and many other manufacturers. The focal plane shutter is simple, effective and, because of its low mass, quiet. There would have been no reason to improve upon the focal plane shutter had the need for a reflex system not arisen.

Arnold and Richter devised a reflex system based on a shutter constructed of a solid piece of glass. By coating the front surface with a mirror finish and placing the shutter axis at 45 degrees to the film plane, they created the first commercially available single lens reflex motion picture camera. FIGURE II depicts the Arriflex shutter design. This obviously looks different from that in FIGURE I, but the function is the same. Remember that the focal plane shutter is made of extremely light sheet metal, whereas the Arri shutter is a hefty hunk of glass. If the Arri glass shutter were constructed as in FIGURE I, a tremendous imbalance would result, which would cause such a horrendous vibration when the camera was turned on that the camera would undoubtedly shake itself from the cameraman's hand.

FIGURE II represents the simple solution. By making the shutter twin bladed with two symmetrical openings, the device is perfectly balanced and vibrationless when running. The dual bladed shutter must obviously turn at half speed, which also reduces noise. This type of shutter has remained popular with many camera designers to this day. Various materials have been employed, such as polished magnesium. However, glass construction seems to remain the most popular.

It would seem difficult to improve upon the Arri innovation. The mechanism is simple: merely one rotating element. Rotating parts are inherently quieter and less complex than mechanisms involving some form of push-pull movement. Add to that the fact that the shutter rotates at half speed and you have the perfect blend of simplicity, form and function. However, the double-bladed or "butterfly" reflex shutter does have one drawback: size. Because of the dual blades and the oblique mounting angle, the shutter does require more room in the camera housing. The Eclair ACL and Beaulieu retain the advantages of the mirror reflex shutter, yet achieve extreme compactness by employing reciprocating, as opposed to rotating, mirror shutters.

Next month we will discuss the features of the reciprocating reflex shutter.

(RIGHT) FIGURE I—Focal plane shutter, such as that used in Bell & Howell, Bolex and many other cameras. It is simple, effective, and, because of its low mass, quiet.

(BELOW) FIGURE II—"Butterfly" type, dual-bladed mirror shutter, as used in Arriflex cameras. The two symmetrical openings keep this type of shutter perfectly balanced and vibrationless when running.

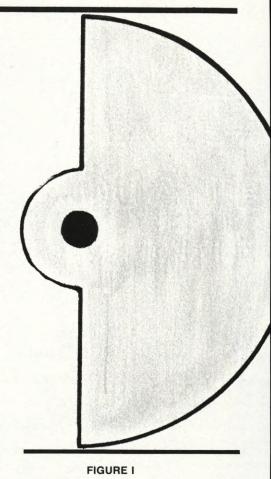
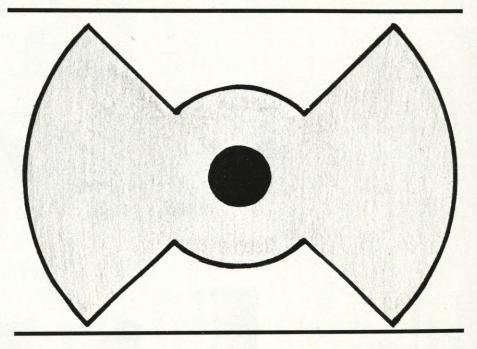


FIGURE II



# Cattott Academy Award Winning Ultra-Fast Aspheric Prime Lenses for 35mm Cinematography

Specifically designed for professional cinematography, these exciting new lenses are the result of an extensive and painstaking research program jointly undertaken by Canon Inc. and Cinema Products Corporation, in cooperation with the Research Center of the Association of Motion Picture and Television Producers.

Naturally, these lenses incorporate all the latest advances in modern lens technology, including multiple antireflective coatings on all elements, floating elements wherever required,

But it is the aspheric property of these lenses that makes them so extraordinary — because aspheric lens

design is inherently superior to conventional lens design since it permits the best possible use of all available light.

And, unlike any other series of high speed lenses currently available for motion picture use, every lens in the Canon series is aspheric.



55mm (T1.4)

85mm (T1.4)

lower, with nothing but neon signs and street lamps for illumination, there's virtually no halation. The Canon aspherics just take the light in: penetrating the scene, holding all the

The Canon aspheric lenses minimize uncontrollable flare (with its concomitant loss in contrast and resolution) and improve the definition and contrast of the scene regardless of variation of light levels within the scene. Even at the highest levels of illumination.

The result on film is photography that is remarkably clear and sharp, well defined and well balanced, with good color rendition and saturation,

especially with regard to flesh tones.

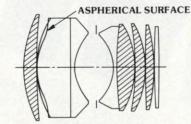
Which makes the Canon aspheric lenses ideal for filming under any and all light conditions. Night-for-night with available light, as well as in broad daylight, or on a well lit sound stage.

#### The technological breakthrough

While the theory for the design of aspheric lenses has been known for quite some time, it was not until the advent of modern computer technology and the development of computer-controlled automated machinery that it became possible to design and grind aspheric lenses in such a way as to permit consistent high quality manufacture at a reasonable cost.

Which is what prompted Canon and Cinema Products to launch a development program for a series of ultra-high-speed aspheric prime lenses, all supplied with BNCR-type mounts, and covering the range of focal lengths most used in professional cinematography: 24mm, 35mm, 55mm and 85mm.

A great deal of money, time and effort went into this program. The final results are more than well worth it.



Arrow points to aspherical surface. The deviation from the normal spherical curve is exaggerated for illustrative purposes.



Studio Camera with Canon 55mm T1.4 Aspheric Lens

#### Let your eyes convince you

Ask your dealer (or call Cinema Products) to arrange for a screening of our dramatic 35mm test reel comparing the Canon aspherics with other high speed lenses for motion picture use.

Before you start on your next film project, shoot some test film of your own.

Your eyes will convince you. The Canon aspheric prime lenses are superior to any other high speed lenses currently available for 35mm



Exclusive world-wide distribution by:

#### Aspherics - ideal for filming at all light levels

By causing the marginal rays to be in sharp focus, and, at the same time, rejecting random or spurious rays, the Canon aspheric lenses improve definition and sharpness at the edges and reduce flare when the lens is wide open.

Shooting night-for-night with available light — the aspheric lens wide open — at 25 footcandles and even



Technology In The Service Of Creativity

2037 Granville Avenue, Los Angeles, California 90025 Telephone: (213) 478-0711 ■ Telex: 69-1339 ■ Cable: Cinedevco



Motion Picture Laboratory
Responsible. For it all.
210 Semple Street
210 Semple Street
Phone 412 687-3700
Phone 412 687-3700
Phone 202 554-7019
New York Area Office:
New York Area Office:
Phone 201 761-4246

#### CONTINENTAL'S INTO EVERYTHING

FROM 42,000' IN THE AIR TO 300' BELOW THE SEA

**ASTROVISION** - Film or tape at 600 m.p.h. - pan 360°, tilt 46° above or below a Lear Jet - full video monitoring - many feature credits.

15,000

42,000

**HELICOPTER MOUNT** - The latest vibrationless systems for film or tape, helicopters, pilots, video monitoring - our credits read like the Oscar Nominations.

\_ 10<sup>'</sup>

**PITCHING LENS** - Our new pitching lens system for special effects in studios or on locations - film or tape - video monitoring.

**BODY MOUNT** - Our new hand held system for film or tape. Unique design, no horizon roll or backache - wide range of cameras, Film and video.

300

**SEI CIN** - Wide range of underwater housings for 16mm, 35mm, and video cameras - top camera crews. Film or tape.





\* 16mm/35mm/70mm/VIDEO TAPE \* VIBRATIONLESS MOUNTS & CAMERAS
PRODUCTION CREWS/CAMERAMEN/VIDEO MONITORING \* ONE STOP SERVICE WORLD WIDE

#### CONTINENTAL CAMERA SYSTEMS INC.

16800 ROSCOE BLVD. / VAN NUYS, CALIF. 91406 / (213) 989-5222 AGENTS IN 16 MAJOR CITIES WORLD WIDE

#### **NEW FROM**

THE 2ND UNIT SPECIALISTS



**THE P.O.V. CAMERA**—Lightest pin registered 100' load variable speed 35mm camera in the world. This new lightweight camera lends itself to many 2nd unit applications because of its size, weight and versatility. The total helmet weight with camera is only 13 lbs. complete with camera, lens, battery, motor, and 100' of film. This super lightweight camera has the following features:

Format—35mm full aperture Frame speed—1 fps. to 48 fps. Registration—pin Shutter—variable 11° to 130° Power—24V D.C. Magazine—100 ft. daylight load Weight—5 lbs. less lens and film

The 35mm P.O.V. Helmet Camera has been field tested on horses, motorcycles and other vehicles and is currently in use on several major features including, most recently, the T.V. special "SPI-DERMAN"



### **FLUID FOR** THOUGHT.

#### Your new portable camera needs a fluid head more than your heavy camera.

That's right! Just as a light sports car needs good shocks to hold it on the ground and smooth the ride, your light camera needs a good fluid head to steady the visual ride.

O'Connor has engineered the Model 30 to be the ultimate fluid head for portable cameras weighing up to 30 lbs.

It's small and weighs only 5 lbs., yet it has the smooth, steady action and features which are unique to all O'Connor heads. It pans 360° and tilts  $\pm 60^{\circ}$  The pan drag. pan lock, tilt drag and tilt lock all operate independently for greater flexibility and control.

The Model 30 has a totally unique counterbalance which is adjustable in the field. One simple tool will adjust the spring to match the weight of the camera.

Adjustable counterbalance provides smooth, consistent, fluid action without the distractive influence of camera weight.

So, the next time your panning gets rough, turn your thoughts to fluid. O'Connor fluid...

when you demand the very best.

1976

Scientific/Technical Academy Award recipient.



My camera weighs



# "I may be working on the other side of the world, but a call to TVC brings me home."



"TVC is professionalism personified. Their technical expertise is complemented by a very human understanding of the art of film.

"The people at TVC speak the language of the filmmaker. I may be working on the other side on the world, but a call to TVC brings me home...in touch with members of my professional family—people whose skill and judgement I trust, whose storehouse of technical knowledge I can always consult.

"TVC is more than a lab—it's a working, caring, creative part of the film-making process. On loca-

tion it's the shoot—not afterwards, when it's too expensive or impossible to re-shoot.

"Wherever I am, shooting documentaries for

Mobil Corporation in Sumatra or Steuben Glass in Afghanistan, I call the lab about the film I'm sending them. When I'm at the ends of the earth, it's good to know that TVC is at the other end.

only as good as your lab. I strive for the best from myself, and I get the best from TVC."

Francis Kenny Director Cameraman





### THE BOOKSHELF

By GEORGE L. GEORGE

#### CINEMATIC DATABANKS

Accepted as the best reference book of its kind, Leslie Halliwell's THE FILM-GOER'S COMPANION has just been issued in its 6th edition, completely revised and in a slightly larger format. Some 10,000 entries cover virtually every aspect of film with unequaled authority, experience and intelligent selectivity (Farrar Straus Giroux \$30.).

In THE NEW YORK TIMES ENCY-CLOPEDIA OF TELEVISION, the news-paper's own TV expert Les Brown offers accurately explicit definitions of words and phrases common in video parlance. History, technique, personalities, programming and regulations are clearly described in this authoritative volume (Quadrangle \$20.).

The 1978-79 edition of Steven H. Scheuer's MOVIES ON TV provides extensive, up-to-date information on more than 10,000 films, both theatrical releases and those made specially for TV. A must for confused video viewers (Bantam \$2.95).

From 1916's Perils of Pauline to TV's current Rhoda, drama on the installment plan has been a feature of our national entertainment. This genre's history is enlighteningly surveyed in Raymond William Stedman's THE SERIALS, now in its 2nd revised and enlarged edition, a well researched and highly readable account (U. of Oklahoma Press \$12.95).

If you're seeking a career in any area of moviemaking, GETTING INTO FILM will prove a helpful book. Written by Mel London, an active writer-producer-director, this well planned and clearly written manual examines each line of work, creative or technical, that eager young people can explore and evaluate (Ballantine \$6.95).

The narrow gauge format has evolved to the point where a book like SIMPLY SUPER 8, meant for beginners, can prove useful even to advanced practitioners. Authors Roger K. Sherman and Barry Schonhaut have expertly stressed in their basic guide both its potential and its tools—camera, sound, editing, animation and projection (Little Brown \$6.95).

A comprehensive data source of the Canadian film industry, FILM CANA-

DIANA 1976-77 includes in its 5th annual edition by Marg Clarkson, a detailed survey of production, distribution and organization, as well as a wealth of relevant material (Canadian Film Institute, Ottawa, \$15.95).

Eleanor Beattie's THE HANDBOOK OF CANADIAN FILM, in an updated 2nd edition, takes a close look at the human and professional structure of the industry. An historic overview is followed by biographical sketches of leading Canadian film people, cooperative production groups, community film and video activities, study centers and technical information (Peter Martin/Take One, Montreal, \$15./6.95).

#### STATE OF THE INDUSTRY

The golden years of Paramount Pictures as seen through the intriguing angle of publicity—posters, campaign books, and other press advertising—are reflected in MOUNTAIN OF DREAMS, an engaging collection by Leslie Halliwell (Stonehill \$14.95).

America's more than 40-year love affair with GWTW is chronicled in an attractive large format, mostly pictorial, book, SCARLETT FEVER by William Pratt, a survey of every facet of what went into the film's making (Macmillan \$16.95/8.95).

The revised edition of Philip French's classic study, WESTERNS, surveys specifically the American theatrical variety of the genre, excluding "spaghetti" and other foreign made westerns. He discusses with intelligence and perception their impact on early film story-telling, the economics of the industry and the thematic evolution of the genre (Oxford U. Press \$10./5.95).

A splendid album surveys six superstars of Hollywood's halcyon days, Blondell, Crawford, Davis, de Havilland, Russell and Stanwyck; THE LEADING LADIES by James Robert Parish and Don E. Stanke describes in both text and pictures their unique blend of sex appeal and stamina (Arlington \$25.).

John Kobal has assembled in MOVIE STAR PORTRAITS OF THE FORTIES a glamorous collection of 163 large format pictures of the then reigning goddesses by the Hollywood masters of the photographic craft (Dover \$6.).

\* \* \*

#### **TOP TALENT**

Boston publishers G. K. Hall & Co. have issued as part of the Twayne Theat-

rical Arts Series three substantial surveys of well known directors. FRANCIS FORD COPPOLA by Robert K. Johnson (\$8.50), NICHOLAS RAY by John Francis Kreidl (\$8.95) and G. W. PABST by Lee Atwell (\$8.95). These thoroughgoing and knowledgeable volumes contain an appraisal of their directorial personality, a detailed account of their careers, an appreciation of their cinematic and social contributions, a selective bibliography, a complete filmography and a useful index.

Gerald Pratley's instructive and enjoyable THE CINEMA OF JOHN HUSTON discusses the director's perception of stylistic innovations, his travels in search of fresh story material, his appraisal of writers and performers, adding up to a thorough and insightful recap of Huston's career (Barnes \$10.).

Lina Wertmüller's controversial delineation in her films of the man/woman relationship is analyzed by John May and Ernest Felita in THE PARABLES OF LINA WERTMULLER, in which she comments openly about herself, her work methods and film themes, permitting the authors to draw stimulating conclusions on religious and secular aspects (Paulist Press \$3.95). In THE SCREEN-PLAYS OF LINA WERTMULLER, her distinctive directorial touch appears with all its versatility in four of her scripts, The Seduction of Mimi, Love and Anarchy, Swept Away and Seven Beauties (Quadrangle \$12.95).

A fascinating and literate memoir, A FINE OLD CONFLICT by Jessica Mitford, tells with gusto and humor the adventures of the British aristocrat in and out of the U.S. Communist Party, with references to the Hollywood Ten's trials and tribulations during the witchhunts of the 50's (Knopf \$10.).

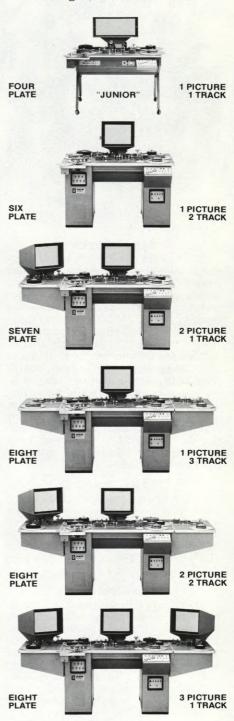
Two new additions to "The Illustrated History of the Movies" series, ably edited by Ted Sennett, include ORSON WELLES by Joseph McBride and AVA GARDNER by Judith M. Kass. Both volumes offer incisive surveys of their careers, stressing and illustrating their particular talent and personality, and discussing their contribution to the art. A bibliography, a complete filmography and an index complete these attractive books (Harcourt Brace Jovanovich \$2.50 ea.).

Dirk Bogarde's A POSTILLION STRUCK BY LIGHTNING is an honest autobiography, written with literary skill and appealing sensitivity (Holt Rinehart Winston \$8.95).

### KEM

A Unique, Modular, Extendable Editing System — Quickly Interchangeable For All Film Formats.

Multiple screens and tracks let you weigh the <u>full balance</u> of images dialogue, music and effects.



EAST OF THE ROCKIES

MM Editing Systems Inc. 230 Park Avenue (at 45th St.), Rm. 339, N.Y. N.Y. 10017 (212) 697-5865

KEM Editing Systems Inc. 6253 Hollywood Blvd, Hollywood California 90028 (213) 461-4143



You can do so many things with the Sonorex, we almost hesitate to call it a projector.

Can this unique

# Can this unique post-production tool save you money?

The only machine on the market designed *specifically* for limited sound studio capability.

Some features:

□ Projects optical track and magstripe prints. □ Deep-focus optical reader. □ 3 pin hardened-steel camdriven claw. □ 3 phase synchronous motor can be master/slaved with other equipment. □ 24V 250W quartz halogen lamp. □ Self-adjusting, load-controlled take-up. □ Automatic shutoff at film end or film break. □ To avoid wear, mag-stripe heads drop out of film path during optical playback. □ You can monitor while recording on either edge or center track fullcoat, or on mag-stripe. □ Elapsed-time counter records hours. □ 20W amplifier. □ 600 ohm 1.5V balanced input and output. □ Mechanical interlock can be uncoupled.

#### 7 of the 19 modes:

(Just to give you some idea of the machine's versatility): 

Transfer optical track to fullcoat, edge or center track. 

Transfer mag-stripe to fullcoat, edge or center track—and vice versa. 

Transfer edge track to center track—and vice versa.

#### Some accessories:

□ Various three-head magnetic head units, including four-track. □ Choice of 15 lenses, including anamorphic. □ 5 digit frame counter. □ Mechanical interlock with other studio equipment. □ Remote control

for forward/reverse, playback level, record on/off, record level.

Separate VU meter whose illuminated screen measures 37% x 25% inches.

Sound studio mix time can run as high as \$280.00 an hour. A good interlock projector can shorten the time you spend there, and save you from some unpleasant surprises.

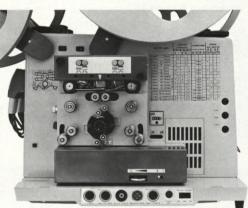
The Sonorex can save you from going there at all! Some people transfer sync effects from ¼ inch, record narration directly onto 16 mag, make the final mix and dub it onto the release print's mag stripe—all on the Sonorex.

For most people, however, the Sonorex saves money by getting them in and out of the mix faster. Transfers and narration recording on the Sonorex save them *time*, too.

Whatever you use the Sonorex for, it's worth bearing this in mind: If the release print is to be projected on a standard 16mm projector, with a 16mm optical track, the sound quality will be limited by that—not by the Sonorex.

Its magnetic recorder side uses a closed-loop threading path, bearing-mounted loop compensators, two massive flywheels, and stabilization rollers.

To get to speed fast, the heavy flywheels are directly driven for the first second or two after starting. Then the centrifugal governor automatically uncouples them.



Sonorex magnetic tape deck side. Diagram at upper right shows nineteen possible functions or modes.

The standard plug-in threehead unit lays an SMPTE 200 mil edge track. And it lets you add a separate 100 mil center track—useful for all sorts of tryout scratch tracks and for multiple language narration, etc.

One accessory head unit provides *four* separate 100 mil tracks on one piece of mag film. You can assemble a "mixed" track and still be free to change any of the four elements.

With the Sonorex, you can run your final cut and mixed track for the client on a six-foot screen with good sound—before spending the big bucks. Final thought: Years from now, transfers on your Sonorex will cost you virtually the same. What will outside transfers cost in 1985?

### SONOREX

MADE BY BAUER FOR ARRIFLEX

P.O. BOX 1102C, WOODSIDE, NEW YORK 11377; (212) 932-3403; 1011 CHESTNUT, BURBANK, CALIF. 91506; (213) 841-0818

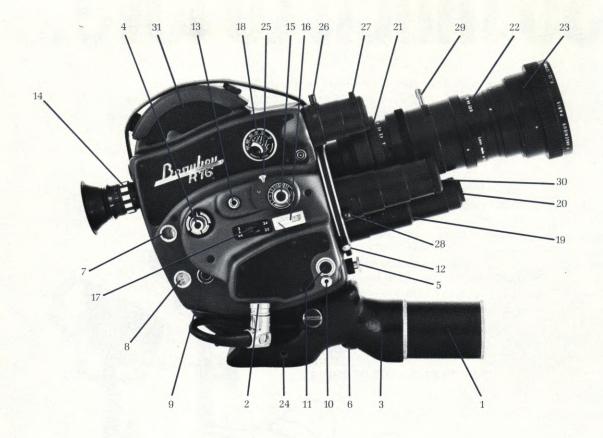
# So much to love.

Dear Boss: Cheer up!! Our problems are solved . . . I've found the place to do all our work: PRODUCERS COLOR! Their video tape house is terrific. It's got the latest video tape equipment, and a staff that really knows how to use it. One nice man told me they have computerized editing and every dub is 100% checked. The editing happens in two large salons, with lots of flashing lights, comfortable seats, and special extended effects capabilities. I especially enjoyed watching them transfer from film to tape and color correct it . . . correctly! In fact, what with the accuracy and the facilities and the neat staff and all the other things here, I've decided to stay at PRODUCERS COLOR. Call me at (313) 345-4866 or write me here at PRODUCERS COLOR, 16210 Meyers Road, Detroit, Michigan 48235. I'll be delighted to help you with all your video tape problems. Maggie WE CAN DO A LOT OF THINGS.

PRODUCERS
COLOR
SERVICE

Motion Picture Laboratory ● 2921 East Grand Blvd. Detroit, Michigan 48202 (313) 874-1112

Video Tape Division ● 16210 Meyers Road Detroit, Michigan 48235 (313) 345-4866



Weight: about 6½ pounds\*

Cost: about \$3,000 less than a comparable professional 16mm camera.

Before you buy your next 16mm camera, consider the Beaulieu R16. It has the same type of full reflex viewing with a mirror shutter as found in the Arri or Eclair. Electronics make it lighter, more versatile, more reliable...and you save thousands of dollars. Check it out at your Beaulieu 16mm specialist in professional equipment.

Beaulieu R16 Bell & Howell / Mamiya Company, Dept. Az 7100 McCormick Road, Chicago, Illinois 60645.

1. Battery. 2. Power socket for the camera. 3. Handgrip with built in battery. 4. Master switch. 5. Release button with cable release socket. 6. Power isolating switch. 7. Footage counter. 8. Frame counter. 9. Zero reset control for frame counter. 10. Single frame release socket. 11. Signal generator socket. 12. Turret locking catch. 13. Remote release socket. 14. Eyesight correction adjustment for viewfinder. 15. Speed control knob. 16. Fine adjustment tachometer for exact speed setting. 17. Speed range changeover switch (24-25 f.p.s. 2-64 f.p.s.) 18. Film sensitivity and filming speed adjustment for light meter. 19. Automatic diaphragm control (Reglomatic). 20. Automatic or semi-automatic selector switch. 21. Diaphragm setting ring. 22. Focal length adjustment ring. 23. Focusing ring. 24. Wrist strap fixing point. 25. Speed locking knob. 26. Power zoom control switch. 27. Electric zooming-speed adjustment knob. 28. Automatic maximum-aperture and telephoto lens-position setting button. 29. Manual zoom control lever. 30. Power zoom on/off switch dial. 31. Accepts 200 ft. film magazine.

\*Body with lens.



### **QUALITY OUTPUT**

"Our customers think we produce the best CRI in the country", comments George Golden of FilmLab Service, Cleveland, OH, "and we do it with an Allen EC 345."

Yes, the results you get from an Allen processor are superb. FilmLab Service and many others have already discovered this fact. But quality output is only one reason for considering an Allen. Our machines are well built, reliable, and realistically priced. And our service, technical support, and parts backup are the best in the industry. Each model features a dependable ATA (Automatic Tension Adjusting) film transport system for smooth running. Solution and energy conservation systems are also standard, as are digital speed and temperature readouts. Automatic load accumulators, 316 SS and titanium construction, and removable racks are other advantages. To find out all the benefits of owning an Allen, request details or talk to our Reps.



#### The Allen Products Company

Box 417, 180 Wampus Lane, Milford, CT 06460 Tel: 203 874 2563 Telex: 964368 European Tel: U.K. Harlow 36038 Midwestern Tel: 312 297 6262 Western Tel: 213 478 1404

# Your light-metering system should be as versatile as your camera system.

The light meter in your camera is good, but not as good as you have to be.

So Minolta has created a general-purpose meter

So Minolta has created a general-purpose meter that responds to your professional needs for accuracy, handling ease and versatility.

The Minolta Auto Meter II is equipped with a sensitive silicon cell for precise readings in low light, instant response and no memory lag. Its automatic scales give you instant, direct readings of incident light. The meter head rotates 270 degrees for convenience. And it's fast and comfortable to use, with a single oversize button that you press to take the reading, release to hold the numbers.

The system.
But the Auto Meter II
is more than a meter. It's a

complete system that allows you to approach any job with confidence.

Spot and incident readings.

You can replace the incident light dome with a 10° spot attachment.\* It comes with an optical finder to insure accuracy.

For wide area reflected light readings, there is an attachment\* that has a 40° angle of acceptance.

Close-ups, too.

A miniature incident dome at the end of a flexible cable plugs into a jack on the Auto Meter II. This unique close-up probe\* is useful for readings at small or hard-to-reach subjects.



Any kind of light.

Four diffusers let you modify the Auto Meter II for any kind of light. It comes with a deep-dome spherical diffuser that integrates all light illuminating the subject.

A flat disc diffuser\* permits measurement in conjunction with an EV/Lux/Foot-Candle table on the back of the meter. And two neutral density domes\* reduce intensity in varying degree to permit readings from extraordinarily bright and/or close light sources.

Enlarger readings.

minolta :

By bayoneting an attachment\* onto the receptor head in place of the incident dome, you can use the Auto Meter II as a spot-reading, on-easel enlarging meter.

#### The vital statistics.

Film speed range: ASA 6 to 25,000

Exposure time range: 1/8000th sec. to 2 hrs.

F/stop range: f/1.0 to f/90

Cine scale: 8 to 128 f.p.s.

Measuring range in incident mode at ASA 100:

-4 EV to + 17 EV

Measuring range in spot mode at ASA 100:

-1 EV to + 20 EV

In addition to the Auto Meter II, Minolta makes a wide range of professional meters. They include 1° spot meters, and meters for flash and color temperature measurement. For information, see your Minolta dealer or write Minolta Corporation, 101 Williams Drive, Ramsey, N.J. 07446. In Canada: Minolta Camera (Canada) Inc., Ontario.

\*Optional at extra cost.

## CP-16 the camera for all seasons

Summer can be pretty tough for a newsman. He deserves a comfortable, lightweight camera



Tom Baer, KBTV Denver

which can be hand-held for long periods of time . . . the CP-16. Unexcelled for the cameraman who must go it alone.

Fall Football season and sports. Ever notice that practically everybody has adopted the CP-16? A rugged, reliable, light weight camera (under 17 lbs. fully equipped). Grab it and run with it, for single system sound or crystal-sync double system work.



WTMJ-TV Milwaukee

CP-16 is the most versatile and reliable camera for the year-around professional filmmaker. See us today for a demonstration of the 'camera for all seasons'.



THE CAMERA MART, INC.

456 W. 55th Street New York, N.Y. 10019 (212) 757-6977 VICTOR DUNCAN, INC.

200 E. Ontario, Chicago, Illinois 60611 (312) 321-9406 2659 Fondren, Dallas, Texas 75206 (214) 369-1165 11043 Gratiot, Detroit, Michigan 48213 (313) 371-4920

Winter It's industrial and commercial time again, with budgets approved and the end of the year approaching, so everyone is in a hurry. The CP-16 Studio Rig is a fast-moving, compact 16mm outfit, but with the same precision controls found on most



Marty Collins Director/Cinematographer, Hewlett-Packard Co.

35mm studio cameras. In fact, with the Studio Rig you'll almost think you're shooting 35.

**Spring** Brings the flood of documentary and feature work. The CP-16, coupled with Cinevid video assist and the amazing new Steadicam provides a system for new dimensions in film.



Director of Photography Steve Golden, "The Streets of Chicago"



ALAN GORDON ENTERPRISES, INC.

1430 N. Cahuenga Blvd. Hollywood, Calif. 90028 (213) 466-3561/(213) 985-5500

#### THE PHOTOGRAPHY OF THE FILM CALLED "F.I.S.T."

By LASZLO KOVACS, ASC

"F.I.S.T." is a film about Johnny Kovak who, in the Thirties, climbs up out of the slums of Cleveland to fight for the American labor movement. After 20 years of struggle to help the working man, his power as a labor leader becomes absolute—but the corruption that goes with it becomes absolute, too.

My main problem visually, stylistically, was to capture the feel of the period from

the Thirties to the Fifties, including the harsh, rough, seedy life and bad working conditions that the characters experi-

I didn't want to be artsy-craftsy and go for a diffused 1930s look, because that to me is beginning to get a little *cliché* by now, so I decided to go against that trend and not use any kind of diffusion. I would try instead to achieve the proper feeling,

texture and color by means of lighting. This involved the cooperation of the production designer and costume designer who, especially in the first half of the story, let earth colors dominate in the cobblestones of the streets, the bricks, the clothes of the characters and the dirt and slush of their environment.

A violent story of the growth of the American labor movement is portrayed in images of harsh realism and photographed with hard, directional light—no diffusion

> I used no diffusion, nothing in front of the lens—and for the first time I discov-













The scenes depicted on these pages are from the recently completed United Artists release, "F.I.S.T.", starring Sylvester Stallone. (BELOW LEFT) Canadian-born director Norman Jewison sits on the camera truck in preparation for shooting a scene. His previous credits include: "IN THE HEAT OF THE NIGHT", "JESUS CHRIST SUPERSTAR", "FIDDLER ON THE ROOF" and "ROLLERBALL", among many others. (RIGHT) Director of Photography Laszlo Kovacs, ASC, shown here on the set, came directly from his assignment on "NEW YORK, NEW YORK" to shoot "F.I.S.T.".



















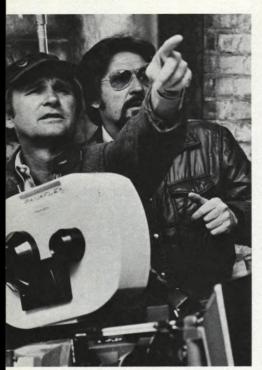




(LEFT) Cinematographer Kovacs checks composition through Panaflex viewfinder. Weary of the cliché of overall, diffused soft-lighting to photograph period subjects, he opted for hard, directional lighting, with no diffusion on the lens. He feels that this style perfectly complements the harsh realism of "F.I.S.T." (RIGHT) To simulate Cleveland of the 1930s, Dubuque, Iowa, was chosen as principal location for the first half of the film. The factory town has changed little in appearance since that time and is not even marred by the presence of television antennas.







Director Norman Jewison and Director of Photography Laszlo Kovacs, ASC, formed a closely knit team on "F.I.S.T.", intensified by mutual trust.

ered how fantastic the Panavision lenses really are. They're wonderful. The harshness is there but, at the same time, the lighting creates a kind of softness and compassion for the people involved in the huge strike and battle scenes.

The director, Norman Jewison, and I did quite an interesting bit of research before starting the film. I suggested that we should look at Eisenstein's "STRIKE"

in order to observe how he handled crowds. His crowd scenes were fantastic, although very theatrical at times. I have never seen montages of moving people handled with such incredible power, but I noticed that his most effective scenes involved only 20 or 25 people. He would start with wide crowd scenes, but the drama would become more and more intense as he moved in tighter and tighter. He would use high shots over the people's heads to show them fighting and struggling, and then there would be closer shots of their faces, legs and feet. I learned a lot of interesting and valuable things from Eisenstein.

In "F.I.S.T." there are two major strike sequences, one of which takes place at night. The people are desperate. They realize that Johnny Kovak is right—that they are never going to get anywhere unless they do something about their lives, which means getting out in front of the factory and throwing up picket lines until the management gives in. So they do that, and one night when the strike-breakers are brought in, a huge street battle erupts.

That sequence was to become one of my major challenges in photographing the picture. It was shot (along with the entire first half of the story) in Dubuque, lowa, a highly industrialized city that time has somehow passed over. It has changed hardly at all since the Thirties. It still has cobblestones and railroad tracks in the streets, great factory chimneys, huge paneled windows—a typical factory town. Also, in that whole city of more

than 80,000 people, there is not a single television antenna, because everything is on the cable. It was just an ideal location, God-given, perfect. It was like a whole strike scene waiting—two huge factory blocks, with a front gate and, a block away, a back gate.

The strikers barricade both gates and set up camps and soup kitchens. This is the situation when they are attacked and the fight erupts front and back. They are terribly beaten. The strike-breakers open the gates and move in and they are locked out.

It was a huge night-for-night sequence and we used 400 of the local townspeople as extras. They were brilliant. Their enthusiasm and understanding of the dramatic situation (once it was explained) were fabulous. And you just can't find faces like that in Hollywood.

From the photographic standpoint, the challenge was to light this enormous street area, lined with three and fourstory buildings. I had about 120 10Ks (you couldn't think in terms of units smaller than that) and I had never dealt with so many lights in my life. They all had to be rigged up high, with brackets and grip units and all that cabling. I decided to use the Mole-Richardson baby 10Ks, so that it would be easier on the crew.

We didn't know what the weather was going to be like, but we decided that if it rained we'd still go for it. I had already decided that all night exteriors would be wet down, and I did the same thing with the day exteriors, too. Another major decision was to shoot the first half of the

There are two major strike/battle sequences in "F.I.S.T." and one of (ABOVE) takes place during daylight hours. It had been decided in advance to shoot daylight sequences only in overcast, in order to enhance the visual drama of the story. But when this sequence was ready to be shot, clear sunlight prevailed in the midsummer Dubuque skies. In an enormous gamble, Kovacs persuaded Jewison to let him reshoot a few sunlit scenes, as overcast skies once again dominated the following several days.









The other major strike/battle sequence takes place at night, and in order to light several blocks of factory streets for true night-for-night photography, 120 Mole-Richardson Baby 10K lights had to be trucked in from Hollywood, Chicago and New York. They had to be mounted up high, with accessory cables and grip equipment. Since it would have been impractical to run so many lights from DC generators, the local power company obliged by rigging AC transformers to provide current.

sequence (which takes place during the day) with no sunlight. This was an incredible gamble and I really stuck my neck out. Patrick Palmer, the Associate Producer, said, "What about if the sun comes out in the middle of shooting the sequence?" And I said, "But what about if we win and it enhances the look of the picture? I can visualize the first half without a ray of sun. It's got to be dismal; there's no place for sun. The dull overcast is symbolic. It strongly supports the feeling and texture of the drama." We lucked out and it stayed dull.

However, going back to the night sequence, my gaffer tried to estimate how many lighting units we would need, as well as cables, generators and so forth. The main question was where to get that number of baby 10Ks. We finally got them from New York, Chicago and Hollywood rental houses-truckloads of 10Ks. Then we realized that to use DC generators to run such a large number of high-amperage units would be unfeasible, but the electric power company came to our rescue. They simply asked us how much power we would need and they set up AC transformers to provide it. Although it was also the cheapest way to go, it did present a problem-namely, that so much AC current is extremely dangerous to handle. As a matter of fact, that consideration ruled out our decision to shoot in the rain. You just can't do it. That put an additional pressure on me, but again we lucked out. There was no rain. The whole sequence lasts four or five minutes on the screen and I'm very, very pleased with the result.

The second strike that occurs in the picture takes place during daylight hours and we have a sequence where the crowd practically storms the Winter Palace. The strikers go completely out of control and, even though they win this time, they destroy everything inside the factory.

Up to this point, we have been ex-

tremely fortunate in being able to maintain consistent overcast for our day exterior filming, even though it's the middle of summer, with 100-degree temperatures and 100% humidity. It has been literally a hellish situation, but on the screen the result actually looks cold, perfectly in kev with some of the sequences Continued on Page 184

In "F.I.S.T.", Sylvester Stallone (left) plays the role of the world's most powerful labor leader, a complete change from the not-to-bright boxer he played in "ROCKY", which brought him fame and fortune. Kovacs is currently photographing "PARADISE ALLEY", which not only stars Stallone in his original screenplay, but marks his debut as director.



# FILMING "HUICHOLE: PEOPLE OF PEYOTE"

By STEVEN R. DREBEN

Producer/Editor

One day while sitting in my office a few winters ago, playing with pencils and thoughts, one of the actors in a film I had just finished for Planned Parenthood called "A FAR CRY FROM YES-TERDAY", walked through the door. "How ya doing man?" Well, I convinced him that I wasn't really doing much at the moment, but I was interested in getting started on another film project, hopefully one that would bring as many awards as the film we had just completed. The actor's name was Tom Perry and he was later to become the associate producer on the Indian documentary which has since been completed with CFI in Hollywood.

Getting back to the story . . . I told him that I was ready for something different, something that had real appeal, directed toward a large audience and something that would be as natural as possible—in other words, an honest and accurate television-film documentary.

Tom had an investor with some money and the man was very interested in me as a director-editor/writer, and apparently, the man would be willing to put up at least the majority of the money. I said, "great", but, of course, I realized that we would have various problems doing an hour documentary with this kind of input unless we did some real speculating ourselves, and our personal working skills would be the speculation.

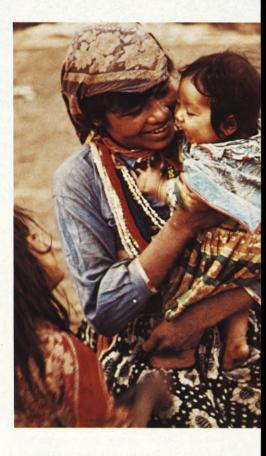
Well, the stage was set and all we had to wait for was the right idea or event, so Filming a documentary about a dwindling tribe of Indians who are direct descendants of the ancient Aztecs meant living with them in their remote Mexican Sierra Madre village and sharing their lifestyle

the wheels in my head began to engage and the usual flood of notions began flowing through, some practical and some impossible . . . (as film-makers this kind of fantasy happens to all of us). At this point in the day my stomach began to call me names and I headed out of the Studio door and straight for the nearest restau-

As I closed the doors to the building and began walking down the street, I was sure I saw an old friend, so I ran up to him and we began to talk about various things until the subject of film came up. Well, this fellow had a very heavy beard and it was really hard for me to know who he was at that moment. After an hour's conversation, I realized he was not that old anthropologist friend I thought he was and during the conversation he never acknowledged the fact that his name wasn't Bob, it was Mel . . . (film-makers get that way sometimes when their minds get stoned on the subject we all love).

Rapidly, there was a realization of the new friendship we both had just struck up. Mel informed me that he had some film footage and stills of a tribe whose people were slowly disappearing through acculturation. The tribe turned out to be the Huicholes and the film footage he showed me was interesting enough, and as far as I was concerned, the potential was there. Our one-hour documentary subject was set, and it wouldn't be long until we would take off.

Mel and I agreed on the main patterns of the film and the general content, and the final length. All that now remained to do was 1,000 things and a phone call to the associate producer. After various conversations and discussions about the business aspects of the film, I became



(ABOVE RIGHT) Great affection is one of the characteristics of Huichole family inter-relationships. (BELOW LEFT) The Sierra Madre Mountains of Mexico, remote mountain home and native terrain of the Huichole Indians. (RIGHT) To work this closely to the shy Huicholes required patience and a considerable period of living quietly among them in order to gain their confidence.





the Producer and the fine editor of the documentary; Mel See and Dr. Kal Muller were to do the field work and the shooting, along with a native named Nicolas Echevarria.

In the end, Mel was to take on the job of editing the sound tracks, due to a problem we had with the wild sound and the original sound editor. We formed a legal partnership with the five people involved, and we set up a plan for the shooting of the festivals and the various family life sequences which were to occur in the two-year period we were to eventually incorporate into the film.

Mel See and I made the decision to use ECO, or 7252, 16mm color stock for various reasons. The main one was that the new 7247 negative had just hit the market and they were having some minor trouble with it. So at the moment, even though I loved the quality and the tests we made on the negative, we satisfied ourselves with the grandmother of documentary stocks . . . 7252. The cameras we used were to be two, the Eclair ACL with the normal Angenieux zoom lens, a Bolex and possibly another camera for wild shooting, the Bell & Howell. Kal Muller had a set of prime lenses for close work and some long distance shots. Most of those lenses were Palliard and Canon. We did rent a 300mm lens for extremely long shots from F&B/Ceco in Los Angeles.

Our major plan for the filming was to get as close to the Huicholes as possible and, because of the basic fact that Mel and Kal Muller were there for a year and a half prior to the actual shooting of our documentary, we had plenty of research material and our contacts were established. The money was there; our commitment was there and, after final legal preparation, the film was to take off.

Of course, there would be various problems while the shooting was going on, the major one being our inability to see the rushes immediately. We would be taking our chances, but with a good lab like CFI and the color stock we were using, it wasn't really that much of a risk. More of the risk would lie in the actual shooting of the people's lives and the content of the events of the film which I knew I would have to put together in the end.

As film-makers we had a good working relationship and we had a minimum of the hassles that face large production companies. All of the members of the crew and the production people on this side of the border worked hard to get the film and the content of the film as involving as possible. We made another decision in the pre-editing stage to create a film that was purely anthropological and, at the same time, one that would be in-

teresting for the layman. I believe we have an honest documentary which incorporates the best of the two worlds, and it has its own freshness and character, especially in the natural beauty of the mountain terrain where we shot, and the montage sequences that make the film colors flow like a fine painting.

One of the major objectives we had was finding the right composition for the morning and late afternoon sequences we were planning to be forced into. When you do a film 95% in the outdoors, you have to prepare for the constant and subtle lighting changes during the different seasons. I believe that we were able to capture many of the coloring extremes, and the fine but gentle hallowing effects which are present as the sun comes over the slightly green and sepia mountain ranges.

With the help of the ECO stock and the Angenieux lenses, we were able to build some beautiful and continuous sequences of people, terrain and color. The Huicholes are a people of colors, and, the beauty of these colors can be seen everyday in their lives; the film examines quite closely the blending of the colors with the life style, which includes some of the most enlightened weaving I have ever seen. In many ways it is the color of the subject matter and continuous movement which makes this film and film-experience unique.

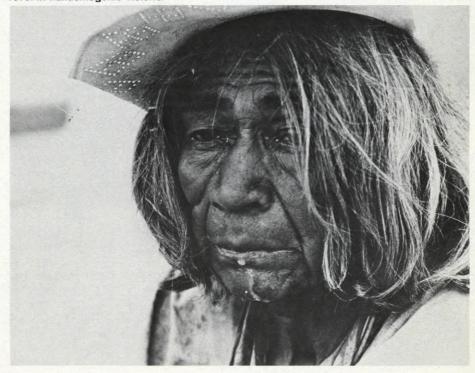
Mel and I were able to plan the editing through individual scenes, each scene



A Huichole dancer celebrates the ritual use of Peyote and dances the "hikuri" step during the great Peyote ceremony. He carries the horns of the sacred deer, a tobacco gourd and a horn to call to the gods.

being able to express in it's own way some larger part of the whole of the Huichole living and existing styles. Each scene is edited for itself, from the family life intimacy, to the difficult terrain the Indians must cross to meet their God . . .

The wise and weatherbeaten face of a Huichole medicine man. The sole inheritors of the remains of the ancient Aztec culture, the Huicholes speak a language of Uto-Aztecan origin and their ceremonies reflect many of the spiritual beliefs of the original Aztec culture. Their dancers revel in hallucinogenic visions.





Grandmother and granddaughter share an intimate moment. Tenderness and affection are an integral part of Huichole family life.

the Peyote. The Peyote hunt and the deer hunt are the most exacting and well executed film scenes I have ever seen in a documentary, except for some of the early ones of Renais and Flaherty, and planning and hard work on the editing

table made it all possible, but more of that later, now to the actual shoot . . .

The mountain home of the Huichole Indians of Nayarit and Jalisco can only be reached by plane. Then the equipment must be carried by hand to the small isolated ranches where the people live. Therefore, the lightweight Eclair ACL camera with 200' co-axial magazine was used, backed up by the rugged Bell & Howell 70DR spring-drive camera. It is wise to carry a spring-drive camera to cover those shooting situations that sometimes develop when all available battery packs have run down.

The ACL is so effectively blimped that it is impossible to hear it when it is running. However, it has a serious drawback. When loading, the loops must be of exact size or else registration can be lost. This could prove disastrous, for the film still runs through the camera. A warning device should be installed by the manufacturers

Ninety-eight percent of the filming was done hand-held, necessitating the use of a lightweight camera. To reduce camera movement, the wide angle 10mm Angenieux pre-focused lens was used. This gave the cameraman extreme mobility to follow the action, but required excellent rapport with the Huicholes in order to get in tight and capture closeups. The result is a fluid camera style with unusual camera angles. The intent was to make the audience feel like a participant, rather than observer of the action.

The shooting of the documentary, "HUICHOLE, PEOPLE OF THE PEYOTE", presented more than the usual problems encountered in documentary film work.

The immediate difficulty posed was the logistics of getting film equipment into an extremely remote area. The only access into this part of the Mexican Sierra Madre is by small plane. Then it is by foot the rest of the way, carrying equipment on back-packs.

Sound recording was done on the Nagra 4-S. Camera equipment and film stocks were carried in water-tight containers as protection from sudden rain storms. However, the biggest weather problem turned out to be the extreme dryness which produced a fine dust that infiltrated everything. At the end of each day's shooting, camera gates and lenses were blown clean. Then the tired cameramen made themselves as comfortable as possible in preparation for the cold, high-altitude nights.

A major problem that developed initially was the reticence of the subjects. The Huicholes are not used to intruders and the cameramen were unable to photograph them for several weeks until they had developed sensitive rapport with a family. This meant sharing the Huicholes' life as much as possible.

For film-makers working with preindustrialized people, a strong effort should be made to show the results of photography to the people.

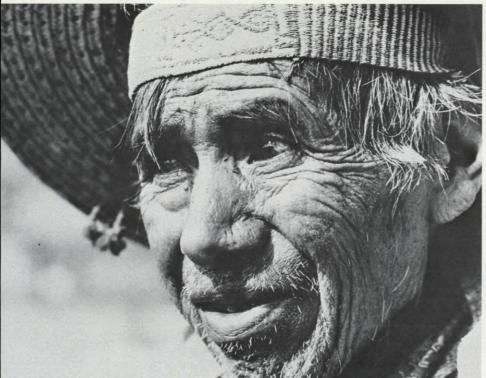
Once the equipment was on the shooting location, cameras, batteries and light meters were checked out. Then the equipment was stored in a place where it was easily available, yet safe from the elements and out of view from the probing eye of the lens. A discarded film cannister can stand out like a sore thumb in the footage.

The next step was to expose the Huicholes gradually to the cameras. At first the camera was like a pointed pistoleveryone tried to avoid being in front of it. After the camera had been aimed and run off a bit and nobody had been visibly hurt or taken sick, the subjects' anxiety began to change to curiosity. This is a critical change, because your subjects now may easily develop the habit of staring straight into the lens, or hamming it up a bit when they see the camera is running. The best way to overcome this was to let the curious ones look through the viewfinder and even let them click off some film, preferably on the 35mm still cameras. Soon most became bored.

There were a few exceptions. One Huichole felt that he could "capture" people in the black box when he aimed the camera at them. This was logical, since he could focus them on the ground

The strikingly attractive Huichole children have a talent for making beautiful and interesting toys out of the simple materials available to them in nature. Their homes are high in the pine forests of the Mexican states of Nayarit and Jalisco.





An old and very wise medicine man of the Huicholes, who are considered by anthropologists to be the least acculturated of all Indians presently living in North and Central America. They implore their gods by blood sacrifices and regard the eagle as their sacred bird. Through the centuries they have changed from nomadic desert hunters to an agricultural society.

glass screen. He often wanted to borrow the camera to capture people, particularly Mexicans. He especially liked the telephoto lens, with which he could capture them without their knowledge. Then his face would light up with a smile.

The best thing to do is to always have the camera in your hand. Then shooting may commence instantly when something interesting is happening. Also the subjects soon come to think of you and the camera as an integrated whole and they forget about what you are doing. This is the point at which the serious filming should begin.

In making "PEOPLE OF THE PEYOTE" without a shooting script, it soon became obvious that each cameraman was also becoming a director. Not that he was rehearsing actors or directing action (he wasn't), but in the sense that he was making the decision when to run the camera and when to shut it off. Also, he was making such splitsecond decisions as deciding on angle and composition. He could film one participant close, or he could back off and include the whole group-thus extending or closing off the totality of the event. This could be termed "selective reality." Suddenly the cameraman was functioning as an artist, seeing, interpreting and structuring the reality about him.

Of course, the subjective reality that the cameraman felt was communicated to the subjects. By living close to the Huicholes, eating their food, and sharing their experiences, the gulf between artist and raw material diminished. My aim for the film was to see the Huicholes as they might see themselves. This was quite an impossible goal, yet I strived toward it.

Maintaining our sense of objective re-

ality became difficult because the Huicholes wanted to learn who we were as individuals. We were the intruders, the 'odd' ones in their culture and they had mixed reactions toward us. Some wanted to test us. Their chance came when we filmed the Peyote Ceremony. It proved to be our most difficult and interesting challenge. On the morning of the ceremony, the Huicholes painted their faces with the designs of their Gods and then began to drink liberal amounts of peyote. Each of us was given a large gourd of water and ground peyote and told to drink. For a second my stomach wrenched at the unbelievably bitter taste, then I stoically drank the mixture. The other cameraman (Kal Muller) did likewise with his. Then we picked up our cameras and began to film.

There was a lot of action going on and I forgot about the peyote. Soon however, I began to feel different; then everything started to get larger-than-life in character. The yellow designs of face painting stood out in vivid relief, the brightly colored bags began to glow with a brilliance unseen before, and suddenly I was totally overcome with the beauty of their art, I wanted to film everything; everything seemed to be coming to life, inanimate designs began to move, the colors advancing and retreating.

Was there film in the camera? I stopped myself at the last moment from opening the magazine to see. I was Continued on Page 182

Music played on hand-made instruments is part of the continuing culture of the Huicholes. Living on small, isolated ranches, they subsist on the barest economy of corn agriculture. The success of the harvest is the only guarantee a family has of surviving the winter. Yet, they cherish their lifestyle, beautiful ceremonies and devout worship of their nature gods.





#### If you shoot handheld, you need

# STEADICAM

Because with STEADICAM, Cinema Products' revolutionary film/video camera stabilizing system, the handheld moving camera finally comes into its own — recording dolly-smooth, jitter-free, handheld moving shots with a steadiness of image never before achieved on the screen.

On location or in the studio, no matter what you're shooting — 35mm, 16mm or video — you'll find that STEADICAM greatly enhances the creative latitude of the director and cinematographer while effectively reducing production costs.

STEADICAM releases the camera from the constraints of dollies, tracks, and heavy camera platforms — permitting

*new* kinds of handheld moving shots, capturing action scenes with a new sense of realism and fluidity in sweeping continuous takes.

STEADICAM allows the camera operator a freedom of movement totally unknown until now. The camera moves with the operator as if it were an extension of his own body and part of his internal "servo-system," constantly adjusting and correcting for body motions, whether walking or running. The camera seems to float weightless in mid-air and the operator guides and controls it with a gentle movement of the hand — panning, booming and tilting — while he himself is in motion. And STEADICAM turns virtually any vehicle — car, boat or aircraft — into an "instant" camera platform.

The "Universal Model" STEADICAM allows the camera to be easily removed and used *independently* of the system, on-the-shoulder or on a tripod. It also permits the use of *one* STEADICAM system *interchangeably* with any one of several handheld 35mm, 16mm or video cameras — an important feature for production houses using *both* film and video cameras.



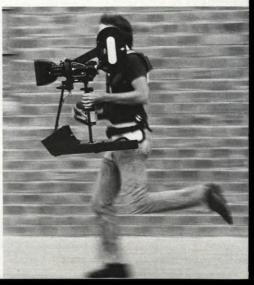


"Universal Model" STEADICAM system shown with CP-modified Arri IIC 35mm camera, CP-16R 16mm camera and TK-76 video camera. Other cameras of the same general weight class can also be adapted for use with the STEADICAM system. For further information, please write to:



Technology InThe Service Of Creativity

2037 Granville Avenue, Los Angeles, California 90025
Telephone: (213) 478-0711 ■ Telex: 69-1339 ■ Cable: Cinedevco





#### The new Spectra<sup>®</sup> Electronic Meters: Sensitive and accurate beyond your wildest dreams!

Imagine a meter that's able to give you readings in light so dim it requires an 8-minute exposure at f1.4 with ASA 25 film! That can go from there to the brightest snow scene... and read both instantly, with utmost accuracy!

This is one measure of the capabilities you command with the new Spectra Series II meters. Built with silicon blue cells and solid-state electronic circuitry, they offer total accuracy from 0.004 to 100,000 footcandles - a twenty-five-million-to-one lighting ratio!

They also give you instant, direct f-stop readings for still and cine cameras with the touch of a button. Choice of incident or reflected light measurements. And a complete new accessory system, too. Your dealer is ready to demonstrate these remarkable new Spectra meters to you. Or write for Lit/Pak P-70. Ehrenreich Photo-Optical Industries, Inc., Woodbury, N.Y. 11797.

- New Spectra® Combi™ II

   Widest sensitivity range: EV minus 6 to plus 18.5 with
- Exclusive dual silicon cells for built-in incident or reflected measurements; choose either or average both simultaneously at the flip of a switch.
- Wide-range calibrations: exposures 8 hrs -1/8000th sec., 1-256 fps; apertures f0.7 f90; footcandles 0.004 100,000; ASA 0.1 25,000.
- No.1.—25,000.
  Pointer "memory" lock.
  Accessories: 1° spot attachment, fiber optics probe, enlarging/densitometry attachment, ground-glass reader, microscope/telescope adapter.

- New Spectra® Professional® II

   Sensitivity range EV minus 5 to plus 18.2 with ASA 100.

   Incident or reflected measurements without accessories.
- Easy-to-read scales: exposures 8 hrs 1/8,000th sec., 1—256 fps; apertures f0.7—f90; footcandles 0.008—80,000; ASA 0.1—25,000.
- Pointer "memory" lock.
  Accepts same accessories as Combi™II.

- New Spectra® Lumicon™
   Silicon-cell footcandle meter (for illuminance measurement only)
- Three measuring ranges: 0.004-10 fc, 0.4-1,000 fc, 40-100,000 fc.
- Pointer "memory" lock.
  Accepts accessory 1°spot attachment for direct Foot-Lambert (luminance) readings, plus all other Spectra Series II accessories.



# THE MIND BEHIND "CLOSE ENCOUNTERS OF THE THIRD KIND"

How Steven Spielberg, a former late-starting Boy Scout who made a three-minute Western to earn his merit badge in photography, went from there to creating a feature as big as all outdoors

(EDITOR'S NOTE: Space limitations precluded publication of the following interview in the January, 1978 issue of AMERICAN CINE-MATOGRAPHER, which was devoted exclusively to the technology involved in the production of "CLOSE ENCOUNTERS OF THE THIRD KIND". This interview with Writer/Director Steven Spielberg was conducted by Steve Poster, who served as Second Unit Director of Photography on the film.)

#### POSTER: We both grew up in the television age. How did this influence you specifically?

SPIELBERG: It really didn't have any influence on me at all, as far as cinematic junk food was concerned. My parents wouldn't let me watch television until embarrassingly late in life. (I won't mention how late in life because I wouldn't want you to know how long I was at home with my mother and father.) But my parents censored all television. To get to watch "THE HONEYMOONERS" meant that the kids-my three sisters and myself-had been good all week. So we were given an hour or so-a kind of recess-to watch TV. The TV set was always this big taboo piece of furniture in the living room that I would sneak down and watch when the babysitter was there and my parents had gone out to a party. I really can't say that the video medium stimulated me to copy or emulate or become involved in it. I had no idea that I would eventually get started in TV-but I got started in a whole different way.

#### POSTER: Then how did your interest in movies first develop?

SPIELBERG: It developed because my father would take a lot of home movies on our camping trips. I had an outdoorsy family and we would spend three-day weekends on outings in sleeping bags in the middle of the wilderness up in the White Moutains of Arizona. My dad would take the camera along and film the trips and we'd sit down and watch the footage a week later. It would put me right to sleep.

#### POSTER: But how did you actually get started making films?

SPIELBERG: Well, I'd take the camera and kind of heighten the reality of the field trip. I'd make my parents let me out of the car so I could run up ahead 200 yards. Then I'd wave them forward and they'd pull up and get out of the car and start unpacking. I began to actually stage the camping trips and later cut the bad footage out. Sometimes I would just have fun and shoot two frames of this and three frames of that and ten frames of something else, and it got to the point where the documentaries were more surrealistic than factual. POSTER: You're now an avid film fan. When did you first get that avid?

SPIELBERG: I became a film fan after I became involved in the movie business. It was only after I began making films myself that I'd go to the Nuart Theater in Los Angeles and rediscover movies that friends of mine who had been into



On location in India for "CLOSE ENCOUNTERS OF THE THIRD KIND", writer/director Steven Spielberg uses a bullhorn to direct a "cast of thousands"—a far cry from shooting Super-8 movies of family camping trips. (BELOW) Always intimately involved in the editing process on his pictures, Spielberg is shown at work with Michael Kahn, who edited "CE3K".



film history for a much longer time knew all about. I was 17 or 18 years old—which is relatively late, because nowadays kids 13 and 14 years old know all about Fellini and Antonioni.

# POSTER: So your first experience was really just playing with home movies of the family?

SPIELBERG: That and the fact that I was a Boy Scout who wanted to get a merit badge in photography. The prerequisite was that you had to tell a story with still photos. Rather than shoot stills, I took my movie camera and made a little Western three minutes long, using friends of mine from the same Boy Scout troop. I cut the film in the camera (didn't do any splicing when I got home) and showed it to the Boy Scouts about a week later. Not only did I get my merit badge. but I got whoops and screams and applause and everything else that made me want it more and more. That was sort of the raw beginning.

#### POSTER: Then that first success inspired you to make more films?

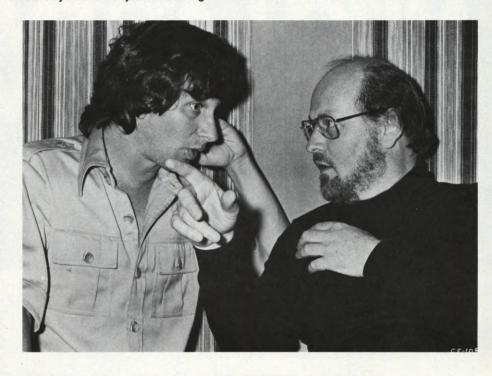
SPIELBERG: It influenced me enough to want to go off and make another Western seven minutes long—using two rolls of film. It was a little more sophisticated. I discovered the editing tool. I discovered the wet and dry splice. My F&B/Ceco, my Birns & Sawyer were all the local camera store in Scottsdale, Arizona.

# POSTER: When you first got started, where did your ideas for scripts come from?

SPIELBERG: They came right out of my ears, really. I mean, I wasn't a movie recluse. I had seen a number of films that my parents would take me to-mostly Walt Disney-so I had some idea of what a movie was. The first one I ever saw was C.B. DeMille's "THE GREATEST SHOW ON EARTH", and I guess, in a way, I tried to emulate at that stage some of the techniques I'd come to appreciate. But really, it was more gut instinct that anything else. I made a war film next called "FIGHTER SQUADRON", because I was inspired by those 8mm Castle Films capsule documentaries of the Forties. They were in black-and-white and they had great gun camera shots of tracer bullets flying out and Messerschmidts catching fire and plunging to earth and tanks and trains exploding. I'd buy seven or eight of those films and pull out all the exciting shots and write a movie around them. The film stocks didn't match, so you could always tell when I was cutting to an actual stock



Spielberg, who enjoys choosing camera set-ups, says: "I feel that part of my function is to interpret the movie visually in terms of where the camera goes, what lens is used, and how the actors are viewed." (BELOW) He also used to compose his own musical scores, but now entrusts them to experts like John Williams (shown here), who scored "CE3K" and won the Academy Award last year for scoring his "JAWS".



shot. The overall tint would change radically.

#### POSTER: Where did you get your actors from?

SPIELBERG: I used young people in the neighborhood, friends of mine from school. If I needed a shot of a young flyer pulling back on the stick of a P-51, we'd go out to the Skyharbor Airport in Phoenix, climb into a P-51 (after our parents got us permission), and I'd shoot a closeup of the stick being pulled back. Then I'd cut to a piece of stock footage of the airplane going into a climb. Then I'd cut back to a closeup of this 14-year-old friend of mine grinning sadistically. Then Continued on Page 170

Spielberg says he needs a strong producer. He had one in co-producer Julia Phillips, who fought for budget and personnel to



# AT MOVIELAB, 16MM GETS JUST AS MUCH ATTENTION AS 35MM.

We offer **16mm** filmmakers a wide variety of special services. These include **7247** and **Ektachrome** Dailies, preflashing, postflashing and forced developing.

Release printing from 16mm Liquid Gate internegatives.

**16mm** to 35mm Liquid Gate blowups.

**16mm** to reduction **Super 8mm** magnetic or optical sound release printing.

So-the next time you have a **16mm** film to be processed, take it to Movielab. Because we think as much of **16mm** as we do of 35mm.



IN THE EAST: 619 WEST 54TH ST., NEW YORK, N.Y. 10019. (212) 586-0360 IN THE WEST: 6823 SANTA MONICA BLVD., HOLLYWOOD, CA. 90038. (213) 469-5981

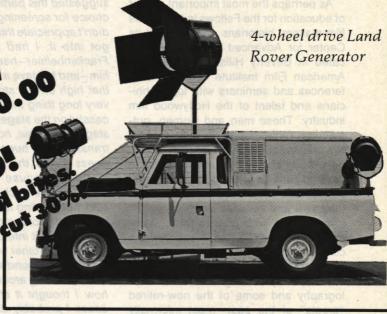
# B & S TRUCK BARGAINS

Camera Step-Van and 250-Amp Generator

Useful 250 ampere DC gasoline generator mounted on 4-wheel drive Land Rover chassis. Unit features built-in platform Molevator and several lighting stanchions. Molevator holds Brute arc up to 15 feet in air

overhauled this year. Tow-bar and specific cables included. Low mileage.

Specifi \$12,500





1-ton heavy duty Chevy Step-van

Custom fitted heavy duty Chevy Step Van with 12-foot-long roof-top shooting platform with rails and stanchions for lights and reflectors. Shooting platform front and rear removable. Heavy duty springs, helpers and shocks. Full-length built-in darkroom. Room for Elemack dolly and tracks, Worral head, three full sets of tripods, standard and baby, hi-hats, triangles, accessories and two studio cameras.



Planned, custom-fitted van interior

Camera Step-van interior has double wood floor, side and roof insulation, indoor-outdoor carpeting throughout, 34" plywood shelves and separations. For protection all doors and windows protected with steel bars for security. A one of a kind vehicle for a most reasonable price.

GREAT VALUE! Spec 1 \$8,950 NOW \$6,265.00



## BIRNS & SAWYER, INC.

SUPPLIERS TO THE MOTION PICTURE INDUSTRY — SINCE 1954 1026 North Highland Avenue • Los Angeles, California 90038 Cable BIRNSAW (213) 466-8211 TELEX 673280



# AN AMERICAN FILM INSTITUTE SEMINAR WITH RALPH WOOLSEY, ASC

#### PART I

A sharing of experience with an Emmy Award-winning cinematographer who discusses techniques involved in filming a classic American play

As perhaps the most important aspect of education for the Fellows in training as film-makers, historians and critics at its Center for Advanced Film Studies, located in Beverly Hills, California, the American Film Institute sponsors conferences and seminars with top technicians and talent of the Hollywood film industry. These men and women, outstanding professionals in their respective arts and crafts of the Cinema, donate generously of their time and expertise in order to pass on to the potential cinema professionals of tomorrow the benefits of their vast and valuable experience.

In keeping with this tradition, Cameraman's Local 659 (IATSE) sponsors a continuing series of seminars with ace cinematographers. These men-both contemporary working Directors of Photography and some of the now-retired "greats" of the past-meet informally with the Fellows at Greystone, the magnificent estate which is the headquarters of the A.F.I. (West), to present valuable information on cinematographic techniques and answer questions posed to them. Very efficiently introducing and moderating each of the individual seminars is "Emmy" Award-winning Director of Photography Howard Schwartz, ASC.

The dialogue which follows has been excerpted from the A.F.I. seminar featuring noted cinematographer Ralph Woolsey, ASC, an Emmy Award winner and one of the film industry's most technically articulate Directors of Photography. The seminar followed a screening of "THE ICEMAN COMETH", which was the premiere offering of the original American Film Theater series, and which Ralph Woolsey selected as among the most interesting of his films to discuss.

In the absence of Howard Schwartz on this particular occasion, James Powers, of the A.F.I. staff, very kindly introduced Mr. Woolsey to the asembled A.F.I. Fellows

JAMES POWERS: Some of Ralph's films include "MOTHER, JUGS AND SPEED", "THE ICEMAN COMETH", "THE NEW CENTURIONS", "DIRTY LITTLE BILLY", "STRAWBERRY STATEMENT" and "LITTLE FAUSS AND BIG HALSEY"—a very eclectic collection there. Do you want to say anything about "THE ICEMAN", Ralph?

RALPH WOOLSEY: Yes. The reason I

suggested this particular film as my first choice for screening here today is that I didn't appreciate this effort when we first got into it. I had been to see John Frankenheimer-had an interview with him-and he gave me the script. I wasn't that high on the story. I knew it was a very long thing that had been very successful on the stage. But it was strictly a stage play. Now, how are you going to translate this huge thing onto film? I guess I said the right thing to John, though, because after reading the script, I came back to talk with him and said, "My feeling is that it should be approached photographically in a way that would make it interesting without being gimmicky. In other words, don't just dolly the camera around and use zoom lenses or keep cutting around." I didn't spell out how I thought it should be done, because I probably didn't know. But that was the magic word and he said, "I'd like to have you do the picture." Fortunately, they had three weeks of rehearsal with the cast. During the final or third week of rehearsal we had the entire camera crew present. This is a very unusual situation. We had planned to use two cameras all the time. With that tremendous amount of dialogue, the shooting schedule would have simply doubled if we had done it all with one camera, plus the fact that many of the scenes consisted of two or more actors seated or who didn't move a hell of a lot. You

could often shoot a matching pair of over-the-shoulder shots or a pair of singles clear through a long, long dialogue scene. Although you can't light quite as well for a pair of over-shoulders as you can for one-or two singles with the people in their actual positions-as you could for one person, I think the compromise was well worth it. There's a slight loss in the lighting of a few closeups, but not much. So we saved a lot of time by using the two cameras. And John Frankenheimer, from his background in live television and many other things he's done, is a well-versed, very knowledgeable man visually. The general question was: "Here's a four-hour movie that's going to be done in one room, on one set. How are we going to do it?" Frankenheimer's approach was that we must never lose sight of the geography at any time. The audience should never ask itself, "How did we get over here?" So you'll notice a lot of wide-angle shooting in "THE ICEMAN". Even though two people may have been predominant in the picture, often the background will be placed carefully and also placed according to the stage line so there won't be too much jumping. In fact, very rarely was there any jump.

COMMENT: I was particularly watching for camera movement during the screening, but most of the time I wasn't aware that a move had been

Eugene O'Neill's famed "THE ICEMAN COMETH" was made into a motion picture by the American Film Theater, as part of its two series of filmed classic American plays. This version of "ICEMAN" boasted a splendid cast, which included Lee Marvin, the late Fredric March, Jeff Bridges and the late Robert Ryan.



made until it suddenly dawned on me that we were into a different composition without any cut having been made.

WOOLSEY: I'm especially proud of the camera movements in this picture. Many times they are so subtle that even today I didn't realize that the camera had moved until I said, "Hey, we tightened that up quite a bit from the way the scene started." We slid across tables at table height. I have a couple of devices that I call "table-scrapers". You can put the bottom of the camera right down on the deck. There's no head underneath it, and it's mounted off to the side of a dolly or boom. You can go right across the bars and tables, and don't have to build special split tables. Occasionally we dollied an actor out of the way at the last second. There are a couple of scenes where we went right up the middle of a banquet table just missing the candlesticks. Sort of a snorkel camera approach, excepting that it was a Panavision PSR camera. The Panaflex didn't exist at that time; it would have been a godsend because of the periscope eyepiece. So that was our approach: to keep the camera setups interesting and to keep repositioning the camera according to the way the play progressed, not make the camera obtrusive. Four hours is a long time to be in one place. I'd be interested in your reactions or questions as to how well that succeeded.

QUESTION: I was very impressed when I first saw it. I saw it in the theaters. I wanted to ask you, how did you achieve the overall look of the film?

WOOLSEY: How would you describe the overall look of the film? I'm interested in your reaction.

RESPONSE: Almost monochromatic. It looks like much of the color is bleeded out. It gives it a very thick look, but it's very subtle.

WOOLSEY: Going back to the beginning again: in discussing the approach with Frankenheimer, who pretty well left the photographic style up to me, I said, "I have a feeling that it should have an antique look. Desaturate the color. Get rid of most of the color, and yet, not all of it." I had done a great deal of forceddevelopment of film-always forcedeveloped all my night exterior things a couple of stops, but with full exposure, so you can get black back into the shadows, rather than the pea-green or cyan look that results if you really underexpose force-developed film. (I had a lot of really good luck with that in another picture called "THE NEW CENTU-RIONS", where we had 40 nights of shooting which was all pushed two stops and the only way we could really go.) I suggested this processing to John as a means, not of achieving more exposure (because we worked on a set; we could have lit the set to any reasonable level), but to do it rather as a means of degrading the color; also you get a little grain. (The new 5247-600 emulsion series we're using at present can be pushed a couple of stops with very little change in grain, and only a minimal color shift.) But the old film, 5254, did produce more grain when you pushed it that far, plus the shift or degradation of color; the bright reds go and the red fire engines always have a little bit of blue in them. Frankenheimer said, "Go ahead. Do anything you want along the line that will give it a little more cruddy look." "Cruddy" of course, in the direction that we were aiming.

# QUESTION: To what extent do art direction and costume design help in a situation like that?

WOOLSEY: The art direction has a lot to do with it. Jack Martin Smith was the art director, and Dorothy Jeakins was the costume designer. Between them they had gone into the ochres or the vellow kind of aged-down, stained look in both the costuming and the sets. In rehearsing for three weeks, we asked that the set not be cleaned up. Let everything that lands on the floor, stay on the floor. If anybody spits on the wall, leave it. This was an early 1900's era when everybody used cuspidors. I mean, they weren't quite personally as neat as we think we are today. There were a lot of things left lying around, so the litter really grew quite a bit. Once in a while we had to sweep the floor to make a dolly shot. Which brings up another little thing. It's very difficult to show the floor in a movie, particularly a wide screen movie. You just don't normally get up and shoot down. The tendency is more to shoot up, I'm sure. They had gone to great pains to make a very old looking floor with rough looking boards, and the art director was very proud of it. (I don't think we ever saw it, except maybe once when an actor fell down.) He was hopeful that we would see all this litter that was on the ground or on the floor. It just doesn't come in. We were more on table top all the time. So the art direction, along with costuming, contributed to the overall look very importantly. We did age down the set somewhat, even after it was constructed, and narrowed it about four or five feet. It was too wide, according to John's thinking, and I agreed with him.

QUESTION: The time frame of the action is continuous from night through to early morning. Did that present any particular problems?

WOOLSEY: The whole picture had to be shot in continuity because of the enormous amount of dialogue. For that reason it taxed one's memory occasionally to recall how he had lit a certain section. There's very little light changing going on. The only light change that took place was so subtle that I don't know if you even noticed it. There was a window in the back that had a shadow of a fire escape or a stairway. You may have noticed that the shadow gradually disappeared and the window got just a little brighter. When the bartender finally pulled the curtain, it was morning. They'd been talking about the fact that it was nearly morning, but it always seemed to be night. The story started at three or four o'clock in the morning, before dawn. You have the problem of how to show a very gradual light change, or should you not show a very gradual light change? Yet this damn window was in there all the time; you kept looking at it repeatedly. Fortunately, you never saw out the front window, as that only happened when you finally drew the drapes. So we decided that beginning with a certain scene when one of the characters mentioned that it was nearly morning, we would have the window a little brighter. Then we just kept building it up a little bit. Finally the drapes were pulled and there was a big light change that occurred, even though it may not have been too obvious. But the whole place brightened up. Then for the first time you saw the front barroom. The initial opening shot in the bar was pretty obviously a night shot, where the bartender pours the whiskey, kicks the cuspidor and walks to the back room.

#### QUESTION: Did you use any yellow filters on lights at all?

WOOLSEY: On back lights and cross lights, but nothing on faces. Those overhead, hanging, old-fashioned lights were stained and yellow looking. We left ordinary household bulbs in them. Occasionally there were photofloods or similar lights that were dimmed down to just exactly the right level for the shot. And occasionally even the key light came from that fixture; but more often it was another light that was placed at a better photographic angle.

QUESTION: You mentioned before on a lot of your night exteriors "exposing the film normally" and over-Continued on Page 166



# DOOR

# The French Eclair npr now \$9,750.\*

- Variable Speed Crystal Motor "Time Code Ready"
- Accepts Most Lenses
- 3-Second Snap-On Magazine Change
- Image Erect View-Finder
- Variable Shutter

The Great Eclair NPR, advantages, now offers ...

with all these for a limited time

CLAIR II

only, on a first come — first serve basis . . . this additional *price* advantage!

\*

#### **COMPLETE NPR CAMERA PACKAGE**

(LENS NOT INCLUDED)

#1101 Eclair NPR with Beala Cirpi motor: includes NPR camera body with double lens turret accepting one CA-1 mount lens and one "C" mount lens, carrying handle, side handle, clapper light, rotating reflex mirror shutter, pin registered movement, magazine drive system, and ground glass with 16mm full aperture and TV safe action area markings; 12 volt DC Beala Cirpi motor crystal controlled at 24 and 25 fps accurate to  $\pm$  10 ppm, variable speed from 4 to 40 fps controlled by rheostat and indicated by tachometer, built-in sync pulse generator with frequencies of 50, 60 and 100 Hz, always stops with mirror shutter in viewing position, automatic or manual clapper system, out-of-sync warning light, and prepared for Time Coding; supplied with one 400' coaxial, snap-on instant change magazine, Angenieux orientable viewfinder, camera coupling cover cap, viewfinder cover cap, coiled power cable, deep flotation camera and accessory case with dense custom die-cut foam, case for two magazines, camera aperture and gate protection plate, magazine front protection cover, CA-1 mount cavity cap, "C" mount cavity cap, instruction manual, film test, and warranty card.

#### PLUS POWER BONUS

**#1505 POWER PACK.** Cine 60-Eclair 12V4AH Ni-Cad battery with separate 115 Volt overnight charger.

Eclair NPR Camera Packa	age \$11,950
1505 Power Pack	330
Regular Price	12,280
YOU SAVI	
IUU SAVI	\$ 4,55U

SOREMEC

905 N. COLE AVE. HOLLYWOOD, CALIF eclair BClair

TWX: 910-321-4192 Eclair USA LSA

Available At Your Eclair Dealer Now!

For Guaranteed Sales & Service Call:

Hollywood (213) 464-2125 New York (516) 889-4810

#### A UNIQUE NEW 35mm P.O.V. HELMET CAMERA SYSTEM

Offered as a significant new professional instrument is Continental Camera Systems' latest development, described as "the lightest-weight pin-registered, variable-speed 35mm motion picture camera in the world"



Photograph illustrating how Continental Camera Systems' new 35mm P.O.V. Helmet Camera System was used recently to provide the pilot's point-of-view in the flying of a helicopter. Everywhere the pilot looked, so did the camera, providing realistic subjective footage of the flying experience. However, the new system is by no means limited to helicopter cinematography. It has been field tested in use with horses, motorcycles and other vehicles—applications being limited only by the cameraman's imagination.

Stunt cinematographer Fred Waugh, who with Mickey Gilberts established the original specifications for the new P.O.V. camera system, is shown wearing it in its helmet configuration. Note how the camera and its battery pack are evenly distributed for balance. The total system, as shown, weighs only 13 pounds—including the camera, the lens, 100 feet of 35mm film, the helmet and 24-volt battery pack.

At the 119th SMPTE Conference, held in Los Angeles last October, Continental Camera Systems introduced four new camera mount products to augment their range of specialized equipment for second unit cinematography. One of these products was a new 35mm P.O.V. Helmet Camera System.

The very heart of this new system is a unique camera that is the lightest-weight, pin-registered, variable-speed 35mm motion picture camera in the world. It was designed to specifications established by Fred Waugh and Mickey Gilberts for a lightweight helmet camera that could film in 35mm with pin registration and a range of variable speeds. The camera was manufactured by Al Beck of Cine Mechanics (Canoga Park), who, as described by Continental management, "is a camera craftsman the like of whom there are few available these days."

In August of 1977, Waugh and Gilberts approached Continental Camera with a request to market their range of 16mm and 35mm helmet cameras. Being stuntmen, they were well aware of the demand for such specialized equipment, but were limited in terms of marketing and leasing it.

As a helmet camera, the total system weighs 13 pounds, which includes the camera, the lens, 100 feet of film, the helmet and a 24-volt battery pack—all self-contained in the basic helmet configuration. The primary specifications



Side view of the Helmet Camera, showing calibrations of its variable shutter, which permits use of any shutter angle between 11° and 130°.



of the P.O.V. camera are:

Format: 35mm full aperture Frame rate: 1 to 40 fps

Registration: Pin

Shutter: Variable, 11° to 130° Power: 24-volt DC, ni-cad pack Magazine: 100-foot daylight load Weight: 5 pounds, less lens and

film

The P.O.V. camera has been field tested in use with horses, motorcycles and other vehicles, and it is currently being employed in the filming of several major feature productions. The camera system is presently being used to provide unique point-of-view shots for the television series, "SPIDERMAN". Most recently the camera has been used with a wide angle lens for shooting stunt situations. Because of its light weight and small size, the camera's applications are limited only by the cameraman's imagination.

On its own, the camera has been used for filming spectacular scenes (while mounted on a car) in "CALIFORNIA DREAMING". It has also been successfully mounted on snow skis and underneath horses. One of its major advantages is the fact that it can fit into areas too small to accommodate 35mm Arriflex, Mitchell or Eclair cameras. Its light weight makes it ideal for use in hand-held situations

The camera system was recently used to provide the pilot's point-of-view in the flying of a helicopter. Everywhere the pilot looked, so did the camera, providing realistic subjective footage of the flying experience.

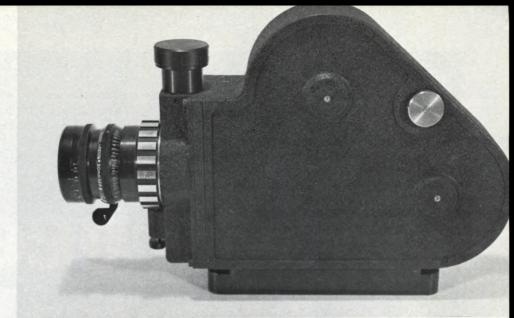
At Continental Camera, Bob Nettman is currently designing modifications to the P.O.V. camera which will make it a reflex instrument and also render it capable of accepting a 400-foot coaxial magazine. In this mode, a video tape unit will also be added, making it, according to the manufacturer, "still considerably lighter than its closest competitor. Already a lot of interest has been generated in respect to its capability for shooting titles and other studio situations."

The new P.O.V. Helmet Camera System can be rented, leased or purchased from Continental Camera Systems, at 16800 Roscoe Boulevard, Van Nuys, California 91406. Telephone: (213) 989-5222.

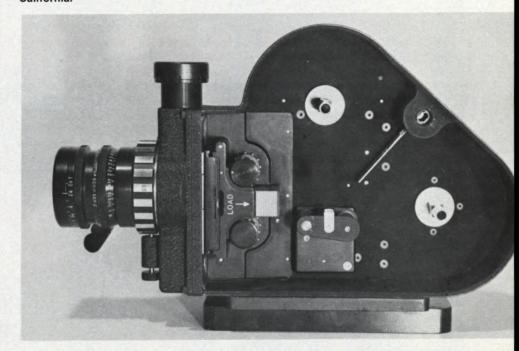
#### **BOLEX ACCESSORIES**

- 24-Frame Sync, Camera motor—115V
  Var. Speed Battery Camera motor—24V
  400-ft. Magazine w/400' counter in camera
  Intervaltimer—Range 1½ sec. to 36 min.
  Animation motor for new single-frame shaft
  Write for Bolex Accessory Catalog

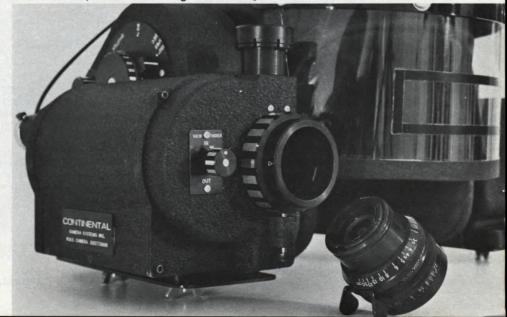
STEVENS ENGINEERING CO. P.O. BOX 1605, NEWPORT BEACH, CA 92663



(ABOVE) Side view of the P.O.V. camera with magazine cover installed. (BELOW) The same view with magazine cover removed to show inner mechanism. As shown here, the P.O.V. camera is equipped with Arriflex mount and 50mm lens. The camera system was manufactured by master camera craftsman Al Beck of Cine Mechanics, in Canoga Park, California.



A closer view, showing the Arriflex lens mount, with lens detached. At Continental Camera, Bob Nettman is currently designing modifications which will make the camera a reflex instrument, capable of accepting a 400-foot magazine. In this mode, a video tape unit will also be added, further increasing its versatility.



# Here's all you need to know about film service.



PROCESSING • SOUND • PRODUCTION SERVICES • PRINTING • SPECIAL SERVICES

Motion Picture Laboratories, Inc., Piedmont Division, 2517 South Boulevard, Charlotte, North Carolina 28203, (704) 525-5416 Motion Picture Laboratories, Inc., Suite 940, 1120 Connecticut Ave., N.W., Washington, D.C. 20036, (202) 659-3528 Motion Picture Laboratories, Inc., Suite 120, 6990 Lake Ellenor Drive, Orlando, Fla. 32809, (305) 857-2328 Cine-Craft Laboratories, 8764 Beverly Boulevard, West Hollywood, California 90048, (213) 652-7357

# If you have a little money to spare you can buy a kid breakfast for a year. If you have a lot of money to spare you can buy him a home.



For 17 years, WAIF, the Children's Division of International Social Service, has been providing homes for homeless children throughout the world.

We've arranged for their adoption and foster care, settled custody or guardianship problems and reunited many with their families after long periods of separation.

We want to continue doing this. And we can. With a little help from you.

Just \$10 can buy breakfast for 8 months for a pre-schooler in Venezuela.

\$25 will provide English language lessons and counseling for

a refugee child coming to the U.S. from Hong Kong.

\$150 will reunite a Mexican-American family separated by immigration problems.

\$240 will pay for a year's foster care for a Vietnamese baby.

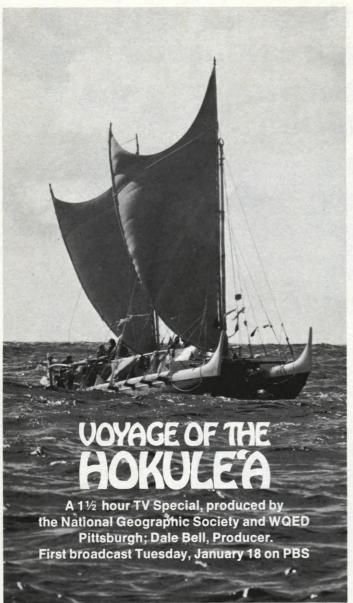
And \$500 will find a home in the U.S. for a rejected Korean child.

Your contribution, no matter what its size, will help make life a whole lot happier for one of these children somewhere in the world.

Send your donations to WAIF, Box 2004, N. Y., N. Y. 10017.

All gifts are deductible from U.S. income tax.





PHOTOGRAPHS BY NICHOLAS DE VORE III, ED GEORGE AND ALASTAIR RIACH.

3,000 miles across the Pacific in a sail canoe. Drenched every day, even sleeping wet. Humidity. Salt. One-man film crew, room for one sync-sound camera: Arriflex.

Cinematographer Norris Brock wore a vest and harness that let him operate the camera, recorder, mike, battery, wireless receiver and mixer, and *still* have both hands free to reload or to prevent himself from falling overboard. The camera wore a wet suit.

Without charts or navigation instruments, could the early Polynesians have sailed deliberately between Tahiti and Hawaii?

#### **Ancestors**

That was the question this voyage set out to answer. If successful, it would help to prove that 15,000,000 square miles of the South Pacific were methodically settled by the islanders, centuries before Columbus crossed the Atlantic.

#### No staging

Hokule'a was a reproduction of an early Polynesian voyage canoe. For 34 days, Norris Brock's job was to shoot on board. Filming was not the pur-

pose of the voyage, so he had to keep out of the way. Nothing could be staged.

#### Cramped

Space was in short supply. Mr. Brock had to sleep and store his equipment in a space 5ft x 3ft x 4½ft. The upper (sleeping) level was soaking wet. The lower (storage) level leaked badly. Both were hot and humid.

#### Wet

Except for some sunny periods in the doldrums, everyone on board was permanently soaked by spray, waves, and rain. From the first day out, Mr. Brock reloaded the Arriflex's magazines with wet hands, inside a wet changing bag.



Shooting one-handed and keeping out of crew's way. Note custom-made harness.

#### **Negative**

"Having used 7247 negative for the pre-voyage sequences, we wanted to use it at sea, too," says Mr. Brock. "Negative meant double-system; and we originally planned on a threeman film crew."



Crowded and laden canoe meant sync-sound filming had to be done by one man.

#### One man

"But after a trial sail, during which we nearly sank, we were told we must lighten the load. *One* man would have to shoot and record the sound, with only one sync camera on board."

#### Stars only

"There would be a radioequipped escort boat following us at some distance, to plot with instruments the course our navigator set by the stars. But we had no guarantee of access to it."

#### No radio

"As it turned out," says Mr. Brock, "Hokule'a's walkie-talkies were done in by the physical battering and the salt water, so we sometimes lost contact for several days. I had a 50ft load gun camera in an underwater housing. And I had four Nagra SNs. And one Arriflex 16SR."



Norris Brock, wet. Note mike mounted above lens.

#### Gamble

"For this job, WQED had looked at every camera on the market. The 16SR was a new and, for us, untried camera. But we figured that the cameras we did know would not hold up. We decided to bet on Arriflex's reputation for reliability."

#### Wet suit

"The National Geographic Society made an amazing PVC wet suit for the camera, with a watertight zipper so I could change magazines. The finder and handgrip with its on-off switch we left uncovered."



Arriflex 16SR in custom made PVC wet-suit, lenses in solid nylon housings.

#### **Nylon blocks**

"I chose two lenses," says Mr. Brock, "The Zeiss 10-100mm zoom and the Angenieux 5.9mm. National Geographic machined housings for them from solid blocks of nylon, with waterproof O ring seals."



Symmetrical finder let Mr. Brock shoot at any angle on either side of camera.

#### **Harness**

"National Geographic also made me a vest with pouches for recorder, camera battery, wireless receiver, audio control unit — and a lifetime supply of lens tissue! And I had a harness made for the camera at a hang-glider shop in California."

#### **Knocks**

"Once at sea, I didn't dare put the camera down on deck, so I had to wear it (with the harness) for hours and days on



Wiping off salt spray every few minutes. Throwaway battery in pouch.

end. I fell down countless times. Having both hands free let me save myself and the camera from the worst knocks."

#### Quick

"The Arri's built-in meter really saved the day, too," says Mr. Brock. "The action was unpredictable. I couldn't walk around taking readings. I'd just start shooting and set the f/stop simultaneously."

#### Corrosion

"After two weeks at sea, the rotating finder froze up from salt-water corrosion. I oiled it and coated it with silicon... worked perfectly. Other than that, no camera problems."

#### **Delivered**

"I shot about 12,000 feet on the voyage," says Mr. Brock. "We had all our eggs in one basket with that camera — and it delivered."



# ARRIFLEX COMPANY OF AMERICA

Arriflex Company of America: P.O. Box 1102C, Woodside, New York 11377; phone: (212) 932-3403. Or 1011 Chestnut St., Burbank, Calif. 91506; phone: (213) 845-7687.

# "THE ICEMAN COMETH" Continued from Page 157

developing two stops ...

WOOLSEY: No. Having extended processing enables you to rate for 200 or 400 when the normal is 100. But when you get a low-key effect with normal processing, usually you cut the exposure. Now I would distinguish that from under-exposing, because you're deliberately doing it. I figure you're not under-exposing it, but you're just exposing for the low end of the scale. You might cut the exposure in half, let's say, for a dusk effect; or for a night effect, maybe more than one stop. But if you extend the development and then cut the exposure a stop, you've lost a great deal. When you extend development, you're merely building up highlight density and increasing the fog level at the bottom. So if you under-expose, which some have done, they have then wondered why it all looks so milky and foggy and why they can't ever get a black in their shadows. By simply rating it up at 400 and then giving it normal exposure at that rating (where it takes a hundred foot-candles at normal you give it 25 with two stops pushed)-you still have some shadow density to build on. It takes a certain amount of dye build-up to make a black.

#### QUESTION: How did you achieve the low light level look in this film?

WOOLSEY: By lighting it that way. It was all pushed two stops for the color shift and the grain, which built up somewhat. The lighting was pretty sketchy, except when the light change came on. Then we had the effect of light coming from the front windows, which was a considerable problem in itself. We had a long narrow set and ceilings were in quite often. It had to look like all the light came from that window. It was all inside of a set and there wasn't a hell of a lot of room outside, like I'd like to have had.

#### QUESTION: What were you shooting at?

WOOLSEY: I think the stop was around T/5. Most of the shots were wider angle. We used six-to-one, I don't even want to say "zoom" lenses; varifocal lenses. Anyway, six-to-one Angenieux lenses on each of the two cameras. Usually they were for just making slight adjustments as the camera would occasionally move, to take off the "zoomy" look. I think there were very few shots that even went as long as 75mm. Most shots were 25, 28, 30, or 35mm. We just got in close. By keeping

the camera low so that it didn't tip up or down, you don't keystone the background and you can get right at table-top level. Also, you differentiate the heights of the people. If you get up at eye level and use a 30mm lens, you have to shoot down to carry people's heads. If you have a crowd of people, you get all of their faces at the same level. This is something I learned from Arthur Miller, who was one of the greats of cinematography in Hollywood. He had a scad of nominations and several Oscars. He said, "Use a wider-angle lens and keep the camera level all the time. And the people behind will drop down and the principals in the foreground will stand out." It really works.

#### QUESTION: Just don't tilt up or tilt down. Is that right?

WOOLSEY: If someone is seated at a table and he gets up, you raise the camera with him. Or as you dolly in to him, you just keep raising it. That isn't always practical. I don't think we do it today as much, now that we have zoom lenses and a few other new things.

#### QUESTION: Did you consider a snorkel technique at that time?

WOOLSEY: No.

#### QUESTION: If you were to shoot it again, would you use a snorkel?

WOOLSEY: Oh, no. The snorkel camera has a very limited use. For one thing, it has a very limited focal-length; it's very short. It's made for the purpose of getting down on pool tables or into cars. I've worked with that equipment, and certainly you can make some shots with it-but, first of all, it has to be mounted on a crane type device, which you could put on a stage crane and lower into the set. But then everything has to be remotely operated. You work off of a monitor. That's not very satisfactory when you have precise, split-field situations going on. A lot of the shots in "THE ICE-MAN" used split-field lenses, split diopters. Usually we had enough depth of field to carry most of the scenes. But occasionally you see a great big head in the foreground; really sharp and everybody else is sharp. There are a lot more of them in the other reels of the picture. That was done with split diopters.

#### QUESTION: Did you use very much diffusion?

WOOLSEY: Very seldom. Occasionally on the girls.

#### QUESTION: It had a very cold look to it. Was that also in the makeup?

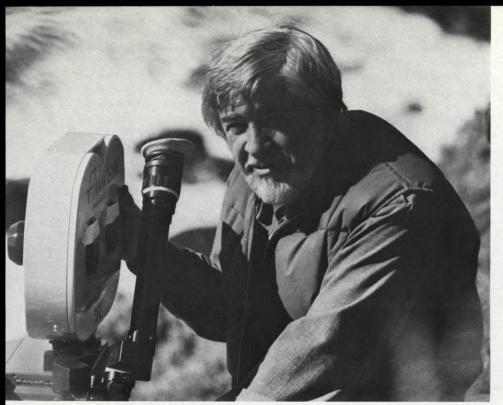
WOOLSEY: Yes, some of that. And then there was the fact that some of the color was printed out, you know. One reviewer described it in a way that I rather liked. He said, "It had the look of shooting through watered whiskey."

#### QUESTION: How many foot-candles were you using in shooting that?

WOOLSEY: I'd have to go back and figure that out. If it were T/5.6, it would be 100 foot-candles at that exposure index of 400.

#### QUESTION: Was the set built in forced perspective at all?

WOOLSEY: No. It was normally built. Totally. There was a ceiling which didn't show up too much here. But there's a party sequence later where it shows this metal type of ceiling-the old-fashioned ceiling that was made up of squares. It was awfully heavy, and it was all mounted on plywood, so whenever we had to take out a piece of ceiling it was a big job. Supporting this was a sort of grid-work of metal channel iron. Occasionally we did have to take out some ceiling in order to hang lights. We had lights hanging all over the place-small ones. You just had to get up on ladders in the center of this room, because of the damn ceiling. Otherwise you had to parallel around a bit, which would function a little better. But this was more pinpoint kind of lighting. I hate to use the old term "pools of light", but actually many of those tables just had little, sketchy beams of light on the characters where they happened to be. Then the walls were lit with conventional lighting. The daylighted sequences utilized soft lighting, which years ago was not nearly as possible because we didn't have the small, intense units that are available now. Nor did we have some of the modern diffusing media. Fortunately the set had an entrance where you came through the saloon doors, then you went to the side. There was an opaque piece of furniture up there just inside the doors. We could put a lot of lights behind it. We must have had six lights behind that thing, going through shower-curtain-type frost (the soft frost material), directing beams into various parts like the bar, the back bar, up on the ceiling. The actors had to be careful walking in so that they didn't step in front of a light source and throw a gigantic shadow. That, of course, would only carry part of the way down the room. You can't make a long, soft streak of light by just beaming it through the window, so in a couple of places we removed ceiling and put more of the same frost material perpendicular to the lights, which were high-intensity baby 10Ks with Fresnel lenses. (Soft type lights wouldn't do anything. We had to project



Director of Photography on the filmed version of "THE ICEMAN COMETH" was Emmy Award-winning cinematographer Ralph Woolsey, ASC. Woolsey, whose feature credits include "THE NEW CENTURIONS", "MOTHER, JUGS AND SPEED" and "LITTLE FAUSS AND BIG HALSEY" among many others, is considered to be among the most technically articulate of American cinematographers.

the soft light for a distance.) This extended the effect of the soft light clear into the back room. We had to do it in various layers, so to speak. I think it was very successful. We lit it so that people could walk all the way from the front to the back and only make one soft shadow on the floor. When we got to that point we figured that it was working. Nothing looks worse than a phony soft-light effect.

#### QUESTION: How long did they give you for rehearsals?

WOOLSEY: The first two weeks were just cast rehearsals. The third week was cast and camera. As I said, the key people and the whole camera crew were there: the two camera operators, the two assistants. The second assistants weren't needed. We went through the whole thing and plotted out where the camera would be in a sort of general way, but we managed to follow it later quite well. When it got around to shooting the actual scene, the cast would rehearse it again. Then we would either confirm what we had originally decided, or make changes. Usually it stayed pretty much according to our original concept. Once in a while Frankenheimer would say, like in starting the second act, "We've got to get a handle on this second act. Do you have any ideas?" And we would kick some things around and come up with something quite different from what we thought we were going to do as a lead-in.

QUESTION: Sometimes on multiple

camera shows they have a camera coordinator telling them exactly what to do. Did you have anyone like that?

WOOLSEY: Everything was precisely rehearsed. We did discuss using closed-circuit monitors, but John ruled that out. Although his background made him familiar with working live TV with the madhouse of monitors, he felt the additional cost, which would have been considerable to have two cameras equipped, wasn't really worth it. The thing was too well rehearsed. It was a movie, really. The camera moves had to be pretty well fixed so that the cutting would work out. When doing a master, if we did use a second camera it probably would have covered a closer angle of the same thing from almost the same place. Most of the time on the masters we only used one camera. John, in some cases, didn't want an editorial choice to be available. However, when covering some of the long scenes where actors were seated (or sometimes one of them walked away from the other), we certainly had the multiple camera thing working. It cut production time way down, yet didn't cause any problems, because that's just part of the job. But it did make more work-we had to be more meticulous, more careful. The attention to detail had to be maintained very closely on a picture like this to make it come off and keep its look consistent. When one camera is shooting one way and the other camera is shooting the opposite angle, you're taking in a lot of

territory.

QUESTION: How long did the actual shooting take?

WOOLSEY: Eight weeks.

QUESTION: You said you lit the background and the walls in a "conventional" way. What did you mean by that?

WOOLSEY: When there wasn't a ceiling in a certain area it was easier to streak the walls from a high position, thus avoiding actors and props, when desirable to eliminate shadows. Who knows where this light comes from? The effect of light coming from the rear window. which always had light on it whether day or night, could be used as a source motivation for light at any time. But we hid the lights either above the set or behind the posts or other objects. So I'd say that's conventional; plain sourcelight. Once in a while the background lights had to be put on the floor because of action or limited space. On film, I don't think you can locate the source of a light for the background, unless it throws a weird shadow from an object onto a wall. No one can tell, so you can put a lamp on the floor to do the same thing that otherwise would be done from the top. There were some wall bracket lights in the set and we had them taken out. With those damned things, if anyone went near them, you would expect back lights or cross lights if you're going to be realistic. The hanging lights were often moved. We'd raise or lower them, pull them back or move them out, but we still had them there in correct geography. Then we could play source lights as though from those practicals.

QUESTION: When you light the backgrounds, what kind of a contrast do you want to see between the actors and the background?

WOOLSEY: You mean as a ratio?

RESPONSE: Yes. Also, how do you expose it? With a hand-held meter or what?

WOOLSEY: I'd do it by eye. I wouldn't use a meter.

QUESTION: What kind of ratio? Just what looks good?

WOOLSEY: Yes - to a practiced eve.

QUESTION: You were talking about a soft-light effect that you use in day-

# light interiors. I was wondering, in a case like that, would you hang your diffusion material on a large drop and bang lights through it?

WOOLSEY: Sometimes you can. In this case there weren't any apertures big enough, because everything was in the damned picture. When you're looking from the back window of the set, the widest shot like that is when Hickey finally comes in the front door. You see the whole schmear. Only one little wall on the upstage left side was hidden, so we pulled that out and put some light through the opening. But other than that, it all came from little slots at the front, so the material couldn't be very wide any-place.

#### QUESTION: So it was mainly mounting the diffusion on to . . .

WOOLSEY: Wherever there was a hole. Some of the window glass was frosty, but the light didn't come through the frosted glass. It came through another hole that you didn't see. But then we put a little light on the frosted glass so it looked like the light source. It meant juggling a lot of things around, especially the pieces out of the ceiling when they were right down to the frame line.

# QUESTION: The picture was projected in the 1.85 aspect ratio here. Did you shoot it full-frame to allow for television, or did you use a hard matte?

WOOLSEY: That brings up an interesting point. On the original series of American Film Theater offerings, they requested us to put hard mattes in the cameras. As you know, the director, Robert Aldrich, has always done that on his pictures. He owns his own cameras for one thing, and he has the 1.85 hard mattes put in. So that's it. If someone asks, "What are we going to do if it goes on television?" he says, "I don't give a goddamn what you do when it goes on television, if it ever does. That's the way I want it." This precludes the frustration of having pictures misframed in the theater, which happens continually, even in dailies. There seems to be no automatic or even human safeguard against this. You'll have people playing cards and there's a vast space above their heads, and the cards are cut out of the picture. Sometimes it's the other way around. and it's very frustrating. So the producers decided they wanted the hard mattes. (Although they were counseled against doing this by the labs.) For the cameraman, it's great. For the operator, it's great. They cannot screw you up on

projection. That's marvelous. But as it later turned out, it was a mistake in merchandising the film for future use.

# QUESTION: Did your Panavision camera come equipped with the required 1.85 hard matte?

WOOLSEY: When we asked the Panavision people that question, they replied, "We don't have hard mattes for any of our cameras. You'll have to tell us what aspect ratio you want." I answered "1.85." Then they said, "Well, what's the measurement?" They didn't want to get on the hook at all, but wanted to know how many millimeters or thousandths of an inch. (It seems there is no exact industry standard for the 1.85 camera aperture.) We found the man who made mattes for Aldrich; got his measurements and told Panavision what to use. These mattes were used on the AFI's first series of films. Now they regret it, because on television they either have to use a solid matte, or blow up and cut off the edges of the picture. With a matte it's much easier to compose for one ratio. If you're always thinking about the damned television frame, the best you can do is just lay the top line right on somebody's head, because even on television there's going to be more head room than you'd like to see. It forces you into a compromising position in framing for two aspect ratios. I believe most people who do it think, "The hell with the television. We'll frame it the best we can for 1.85 and let the tube worry about it." Some of our pet peeves, of course, have to do with exhibition of our films.

# QUESTION: Why not matte it when you make the print? Shoot the full negative and then print the matting?

WOOLSEY: That's been done. My first experience with a printed matte was on a picture called "THE LAWYER", which Sid Furie directed. That brings up a related subject. At the time, we were using the imbibition printing process, which has now gone to China. Technicolor sold that. It's a dye-transfer process. The matte was simple, because the lab made one pass with a black dye and printed the masks on to the blank printing stock. Then the three primary subtractive colors were successively transferred onto that masked-off blank. Masking has been done in standard release positive printing. But it costs more and the laboratories will almost invariably try to talk the producer out of doing it. (Producers are easily talked out of anything that costs money anyway.) So it's very difficult to get a mask printed on. Another objection is that the more the

print is run the more the mask area gets scratched. In a theater with less than 1.85 aperture plates, you're going to see black and white animation going on above and below your picture. And 1.85 is only a theoretical standard. If you run film in theaters all over the country, you find that they vary tremendously, especially in older houses where the projectors are inclined at quite an angle. There they simply file out the aperture plates to fit the screen and to compensate for the keystone. Really. Otherwise you're going to have a keystoned picture on your screen.

QUESTION: I used to work at a theater in the projection room. I was amazed at the fact that they didn't have 1.33 apertures, 1.66 or anything. We would get old films, "SNOW WHITE AND THE SEVEN DWARFS", for instance, which was shot in the old ratio; 1.33, I guess. At the last scene, you'd see somebody's head. They'd have to frame it up to see the head, then frame it back down again. It's horrible. So other than hard matting your print, how do you deal with that?

WOOLSEY: We even have a problem in the studios where they're supposed to have good projection. Many machines now have frame indicators, yet we still have to pick up the phone and say, "Hey, give us more head room," or "Give us less head room." Cutters now add standard aperture leader to the film for dailies; then the projectionist can see whether he's centered or not. But sometimes they don't even look at that. It can be pretty brutal, especially if you are on a location with portable projection equipment. I was in Canada this spring for six weeks doing second unit on a Fox picture called "THE SILVER STREAK". We shot about a hundred process backgrounds for the picture, which all takes place on a train, and looked at the film every day that it came up. The first unit was shooting 1.85, but the process plates are shot full aperture, even bigger than Academy, so there were two sizes to look at every day. The first unit cinematographer, David Walsh, complained that his picture was misframed to the left all the time. One day I looked at the projector and found that the 1.85 aperture plate was bent and wasn't going all the way into place. It was simply reframing about eight inches of Davey's picture and he was getting after the operators to center it. When we pulled the plate out, our picture, which was much larger, was all there-you could see it from sprocket to sprocket. Another thing-the 1.85 mattes that they send out with these portable projectors can be anything

from 1.6 to 1.9; you just don't know.

COMMENT: I think the craziest framing I ever saw was in San Francisco. In the film there is a scene in a waiting room in a pet hospital. The picture was so misframed that up at the top of the picture were the animal trainers at the top of the set giving hand signals to the animals.

WOOLSEY: Good thing they didn't have any giraffes involved. I once went to a theater in Sherman Oaks where things were so bad you just expected anything to happen. When the carbon arcs would go out, nobody in the booth would notice it, or bad focus, plus a few other things like that. On the way out I said to the assistant manager in the front, "This has to be the worst projection I've ever seen. One projector is out of focus on the left side all the time. The other one is never in focus." He replied, "You're absolutely right. But if you want to see some really bad projection, you should go downto-" And he named another theater, adding, "My brother owns it and they never have had a good picture there." But he didn't offer to do anything about his poor exhibition.

QUESTION: In order to achieve low light levels, have you ever printed down?

WOOLSEY: You mean overexpose and print down?

**RESPONSE: Yes.** 

WOOLSEY: Sure. As a matter of fact, this was the method used in three-strip Technicolor in what we call the "old days" to achieve low-key effects. They used separation negatives; three black-and-white negatives. By overexposing a scene and then printing it down, they got more dye in the positives that are the basis of the matrix system. Shadow areas built up enough combined cyan, magenta and yellow dyes to produce a black. A very thin negative didn't produce a matrix which picked up

enough dye. That's why they started the overexposure print-down routine. (It isn't as necessary in shooting negative color.) The three-strip system with the matrix printing probably made possible more variations than we ever have now. Pictures like "MOBY DICK", for instance. Technicolor could alter the densities and contrast of each one of the color records or the positives, and do all kinds of magic things.

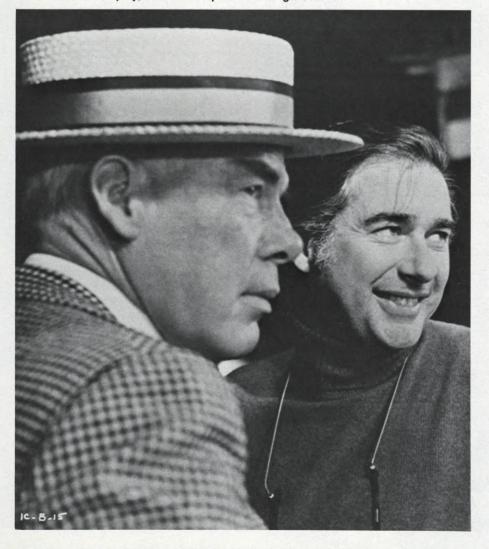
QUESTION: Why did you choose to shoot at 100 foot-candles? Was that to get enough depth of field? Did you consider shooting at a smaller aperture?

WOOLSEY: It probably worked out because we turned on a few lights and stuck up some diffusing material and found that 100 was an easy number to work to. (Sometimes it's the difference between using a lot of little midgets or inkies or jumping up to babies. If you know that some times you're going to need more, it's nicer to have a little leeway. In other words, take a light that puts out twice as much as your minimal need and put a double net on it. Then you've got twice as much any time you want it by just losing the net.) In this case we did use many very small units for lower amounts of light. But getting enough light was not the problem; it was where to put the light to get it out of the way and hidden, particularly in the soft-light or daylight scenes.

QUESTION: Did those zoom lenses have an aperture opening or f/stop where they are the sharpest?

WOOLSEY: They're pretty good all the way. The Angenieux 20-to-120 is really an excellent lens. I'm using one right now, because it saves changing lenses. You can also shorten dolly moves. Most colleagues of mine, I'm sure, would concur with this idea. You don't want to see a zoomy look, unless it's an impact type of thing or when it's really called for. But you can really save a lot of time and get some nice effects by just making a slight lateral or any other movement with the camera when you're changing the focal length; or maybe when somebody walks in front of the lens. There are innumerable ways in which you can mask that change of focal length or magnification. Really, it's the magnification that's changing and the perspective changes also if you move the camera. If you don't move the camera, you don't change the perspective. You can always see the difference if you make a Continued on Page 176

Lee Marvin and Director John Frankenheimer. Having been a live television director during the "Studio One" and "Playhouse 90" "Golden Age" of American television, Frankenheimer was not dismayed at the prospect of filming "THE ICEMAN COMETH", a long continuous-action play, which takes place in a single set.



#### "CLOSE ENCOUNTERS" Continued from Page 153

another closeup of his thumb hitting the button. Then another stock shot of the gun mounts firing. I'd put the whole thing together that way.

#### POSTER: So you really created a lot of your own footage.

SPIELBERG: And a lot of my own technique, also. I remember doing things at 16 that I was later surprised to see being done in 35mm in the movie theater. I don't believe anything to be original. I didn't really invent anything, but I remember doing flash cuts long before "A MAN AND A WOMAN" came out.

# POSTER: Did you actually write your scripts out or just make them up as you went along?

SPIELBERG: Most of my scripts were written on the backs of graded arithmetic papers, in loose-leaf notebooks, anywhere I could find something to write on. Most of the time I would write the scripts, commit them to memory and then tell the people what to do. It wasn't until much, much later that I would sit down at a typewriter, write a shooting script, make Xerox copies and hand them out. But it was one of the best lessons I ever learned. I learned to keep a film in my head, then dole out what was needed to be told to the people who were performing and who were the technicians.

#### POSTER: At that point, who were your cast and crew?

SPIELBERG: Just youngsters my own age who went to the same school and had nothing to do on Saturdays-just like

me. All the guys who discovered girls early never had anything to do with my movies. The guys who were dating at 12 and 13 thought making movies was kid stuff, and so most of the friends I had helping me on those films were the latestarters in life. Someday I'll have a latestarters reunion to see how happily married they are, as compared to the jocks and others who had no time for us. I just had lunch with two of my old high school friends who were late-starters and they were telling me that all the jocks and heavy-hitters in high school are now divorced and miserable . . . and cops.

#### POSTER: What kind of movie equipment did you use when you were just starting?

SPIELBERG: My father began by buying himself a regular 8mm Kodak movie camera. There was no through-the-lens viewfinder. You looked through two plexiglass flip-up finders. Later, when he bought a triple-turret model, there were three rectangular outlines on the plexiglass-red for the telephoto lens, yellow for the medium lens, and blue for the wide-angle lens. Those cameras were the wind-up toys. You had about 35 seconds of wind and then you'd have to crank it up again. Then later one of my films won first prize in an amateur film festival-the Canyon Film Festival in Arizona-and the prize was a 16mm

#### POSTER: How old were you?

SPIELBERG: I was 15. But I knew that I couldn't afford 16mm film processing and I knew that the camera would just sit on the shelf until I could afford it, so I traded the camera in on a Bolex-H8 8mm movie camera. It was very fancy equipment at



the time. At the same time, with a little help from my dad, I got a Bolex Sonerizer, which was the first piece of technology capable of recording sound directly onto 8mm film with a magnetic coating down the side. Now I was able to make pictures, send the cut footage to Eastman Kodak and have them put the magnetic stripe on and send it back to me. Then I would post-sync all the dialogue, sound effects and music in my living room.

# POSTER: This more sophisticated equipment must have made it possible for you to make much more ambitious films.

SPIELBERG: Yes. I did science-fiction movies and, with the Bolex, I was able to shoot a sequence, rewind the film and then shoot double-exposures-people disappearing, beautiful young women turning into ghoulish nightmares. I'd use the old Lon Chaney dissolve trickapplying a little more makeup every few feet and dissolving from one stage of malignant facial growth to the next until I had Vampira. A lot of the technique was dictated by what the camera could do. I bought a little double polarizer so that I could fade in and fade out. These are antique now, just as Lionel trains are now antiques, but I was able to use the stateof-the-art such as it existed in 1961-62 and still make films that were pretty sophisticated.

#### POSTER: To what extent did you get involved in editing at the time?

SPIELBERG: I edited everything myself. Once I discovered how important the cut was, I never cut in the camera again. I



would shoot all the master shots on one roll, all the closeups on another roll and all the action and trick shots on a third roll. Then I would break the film down and hang the separate shots on pins on a little makeshift cutting rack in my bedroom at home. I'd label each one with a piece of tape, identifying it by number, what was in the scene and where it was to go. Then I would pull each one off its pin and cut the way they cut today. So I really assembled the film. I became a film editor before I became a professional director.

# POSTER: Your techniques were pretty sophisticated. Where did you learn the methodology that you used?

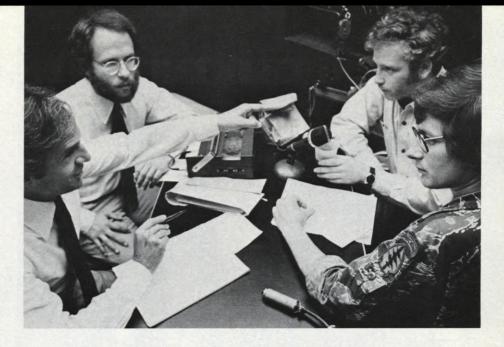
SPIELBERG: I don't know, Steve. I've thought about that a lot, because I really can't say that I went to movies and would come out so excited by a technique that I would come home and try it myself, because I actually didn't. When somebody in a scene walked, I'd walk the camera with him because it seemed natural to move with the person who was walking, as opposed to putting the camera in cement, letting the person walk over to it, say his line and walk away. So certain things were, I think, more natural than learned.

#### POSTER: Did you read about film technique?

SPIELBERG: No, I didn't, because in 1961-62 in Phoenix, Arizona, film literature wasn't what it is today. They were writing books called "How to Make a Movie", which told you what cloudy-bright meant, as opposed to open-shade. It was only later really, when I was in college, that I belatedly started to read up on the things that were available at the time—but not in a small city like Phoenix.

# POSTER: How did you exhibit your first films and who made up your audiences?

SPIELBERG: The audience was usually composed of children under 12. I sold tickets for a dime (later raising it to a quarter) and they'd come over to my house. We'd use the family room and they'd sit on card-table chairs. That was my first audience—youngsters. I made a film at 16 called "FIRELIGHT", which was a very ambitious science-fiction film that ran 2½ hours. It was made with a sound stripe and had sync dialogue, music and special effects created in the camera involving four, five and sometimes ten passes on a single piece of



film. I showed that film at a buck-a-head to 500 people. The film cost \$400 and I made \$100 profit the first night it showed. With that, my father was transferred and we moved the next day to San Francisco—actually 24 hours after the premiere of my first sophisticated full-length movie. After that my life changed and I went without film for about two years while I was trying to get out of high school, get some decent grades and find a college. I got serious about studying.

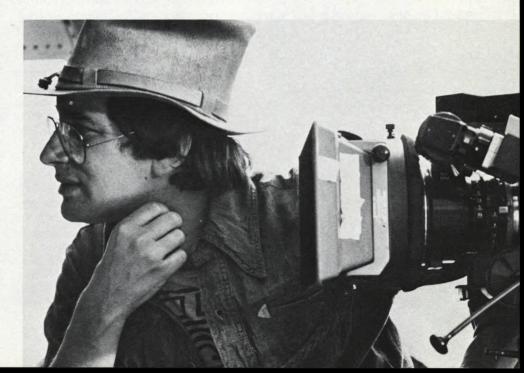
POSTER: In your first projects you had to do most of the things yourself that it takes to make a movie. What parts of the process did you enjoy the most?

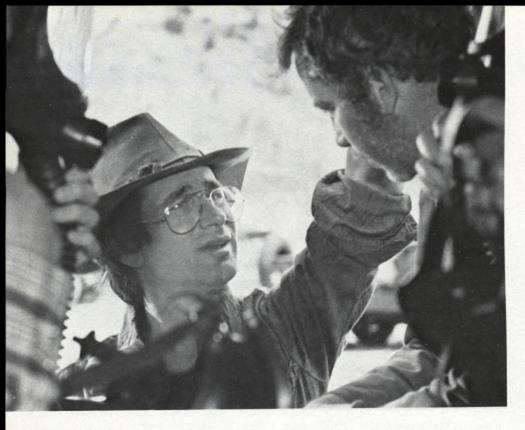
SPIELBERG: I guess I enjoyed setting up the shot, placing the camera so that what took place in front of it would be more interesting. I found that making set-up choices was much more interesting than anything else. I was very much into angles, tricks, subjective points of view, and I'd always let the camera tell the story. Later I learned how to let the story tell the camera, but it took a while before I learned that lesson.

Secondly, I enjoyed editing, because I would be able to see my mistakes, fix my mistakes and make it better. Also, there was much less pressure involved in sitting by myself in front of a tiny wet splicer and viewer than there was in trying to beat the sun—all the things I find haven't changed even today.

POSTER: When you began to get more involved, what responsibilities did you begin to delegate to other people?

SPIELBERG: I didn't. My problem was that the more involved I got, the more I did everything. (I'm still talking about making amateur films.) But the more films I made, the more I wanted to do





myself-short of acting. I did about everything else. I was my own gaffer, my own key grip. I built the sets myself. I did everybody's makeup. I wrote all the scripts. I used the high school band to score a movie. I played clarinet and wrote a score on my clarinet and then had my mother (who played piano) transpose it to her key. We made sheet music, the band recorded it, and I had my first original sound track. So the more I got involved, the more I wanted to do, and the first time I realized it was impossible to do everything was when I started to work professionally and found that there were certain limitations dictated by certain unions that wouldn't let me run the camera, cut the film, and compose the music-all on my DGA card.

POSTER: After watching you work



last summer, it's obvious that you influence almost every aspect of production, but in working professionally what are the areas of responsibility that you still like to control and what areas do you delegate?

SPIELBERG: Now I delegate happily the functions that I feel there are people much better equipped to execute than I am-functions like makeup and set construction and composing music. These are things I used to do myself, but now I delegate them to people with whom I feel very secure-and I never look back. But there are other functions that I continue to get involved in-where the person is either my surrogate or my sounding board, and I pretty much work directly with these functions through the person that I hire. For instance, cinematography. Although I can't set the lights, I feel that I'm very influential in deciding how a scene should look photographically. I like to set the mood by talking to the cameraman and spending as much time as it takes to get my vision across to him. And setting up the camera I still do myself. I feel that part of my function is to interpret the movie visually, in terms of where the camera goes, what lens is used and how the actor is viewed. I feel that this is my responsibility to the story. The other function that I'm autocratic about is editing. I consider myself the editor of my own movie and I collaborate with the person there. If that person has anything to offer and it's a good idea, I'll use it without question, but for the most part, I feel that editing is my thing, as well as cinematography. The other thing that I'm getting into now is exhibition—how a film should be distributed, what the ad art should look like, what the campaign should be like and what the marketing should be like. These are things I'm getting more and more involved in now that I know how easy it is to injure a film after it's made and before the audience sees it. After "SUGARLAND EXPRESS" I learned how important marketing is. I think it's as important as making the picture

POSTER: Your films show that you have an amazing ability to strongly affect an audience. What did you learn from your early films that helped you develop this ability?

SPIELBERG: Well, the first thing I realized is that the audience is the key. I've been making films through myself and for an audience, rather than for myself and the next of kin who understand me. I guess I might be called an "entertainment" director—or, to be more crass, a "commercial" director. I don't pretend to understand how an audience changes every two or three years—which they do—but I know what I like and I hope there are enough people out there to share that. So I kind of use myself. I'm kind of my own audience.

POSTER: You're a storyteller.

SPIELBERG: Yes, I like to spin yarns. I thought "JAWS" was a big fish story and I had fun spinning that one, as opposed to "CLOSE ENCOUNTERS", which was much more of an inspiration for me than a methodical attempt to manipulate an audience, as "JAWS" was on my part.

POSTER: What do you mean by "inspiration"?

SPIELBERG: "CLOSE ENCOUNTERS" was an original screenplay from an original idea, so it was a much more organic involvement. "JAWS" was based on a novel, so the idea came from elsewhere. The basic structure of the film is related to you through the novel, so what I did was adapt the novel into a movie that I thought was more me than Peter Benchley, and that made me happy. But what I'm saying is that it wasn't 100% my film. It's a film that I'm going to share with a lot of people for a long time, as opposed to "CLOSE ENCOUNTERS", which is much closer to me.

POSTER: How do you determine what an actor needs from you in order to give you the performance you're looking for?

SPIELBERG: Basically by how insecure he is as an individual. I think a more secure actor is much more of an experimental actor. He doesn't fall back onto himself. He'll fall back on a strange idea that he can't really relate to. He'll try just about anything. The other kind of actor who is, I guess, a lot more neurotic and concerned about how he comes off, how he's going to sell, how he's going to look, is the toughest kind of person to work with, because he's just the person who won't take a chance, won't experiment, but falls back on the things he knows how to do. I've worked with both kinds of actors. There's a certain type of actor who can do only one thing, and because he has been successful at it, he doesn't give himself the chance to explore any deeper than what is saleable. Richard Dreyfuss isn't that kind of actor. Richard is the kind of actor who will go out on a limb, even to the point of embarrassing himself-to be different, to do something unusual, to not be Richard Dreyfuss, but to be the person that the writer intended him to be.

#### POSTER: How much of that do you decide beforehand?

SPIELBERG: It's all in the casting, Steve. I feel that 40% of my creative effort has been realized once the people have been cast in the film. I use actors to service me in what I'm doing. I try to make it a collaborative effort, because if an actor has a good idea and it's going to make the picture better, I'm not going to ignore it because of an ego thing. It's something that I'm going to put into the movie as fast as the idea sounds appropriate. But I know when I first cast a film that it's going to be pretty much a typecast film. I hired Robert Shaw for Clint, but possibly Robert Duvall would have been more interesting-although not as





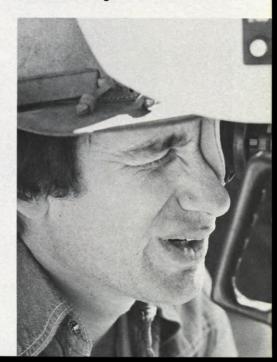
powerful or as theatrical as the character should have been played. I could have gone many different ways with "JAWS". The book suggested somebody like Robert Redford to play Matt Hooper, but I felt there would be more sympathy for the character—that he would seem less of a dilettante—if someone like Richard Dreyfuss played him. So, in that instance, I went against the grain of what was written. It really depends on the story. I feel that the story dictates everything.

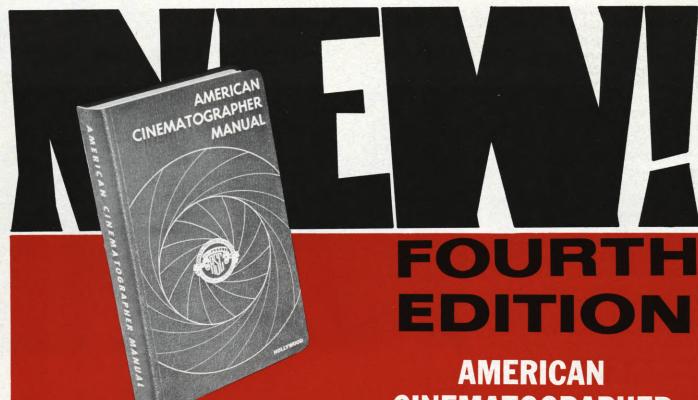
POSTER: This sort of leads us to the subject of previsualization. You seem to preplan most of your shooting (the sketchbook of scenes we used last summer was a good indication of that), but when you get on the set I've seen you throw out the original ideas and completely redesign a scene. Just how important is previsualization to you?

SPIELBERG: Well, it's important perhaps in the sense that it makes me feel secure in knowing that no matter what new ideas may come, if I'm bone dry one day and nothing new hits me, I can fall back on a good idea that already works on paper. It's important that I get up in the morning knowing that if worse comes to worst, I have the "A" Plan that worked in preproduction, worked on paper, and will work on film. But I always try to fight the rote method of filmmaking. I try to work from my imagination day-to-day, slightly veering off from that methodology of sketches and the Hitchcock-Disney syndrome-but the preplanning has really helped me in action

sequences. I'm lost unless I've preplanned an action sequence-first in my head, then on paper, then finally, over a period of weeks, on film. But in other instances, I'll preplan scenes basically. but would rather let the actors inspire me. If there's an emotional scene to be played, I'd much rather stage it with the actors, tell the cameraman, gaffer and crew to wait outside, and then begin making visual choices after I've watched a rehearsal. After I've let the actors move where they feel they should move, I come in and somewhat choreograph the action. Then the third phase is to introduce the camera and film to it. So I actually have two different methods of working.

POSTER: When did you first begin to develop these two different methods? Continued on Page 198





# MOST COMPREHENSIVE COMPILATION OF CINEMATOGRAPHIC DATA EVER PUBLISHED [

Completely updated Filter, Lighting and Lens sections. Data on most recent camera developments. Complete shooting data for Theatrical, Non-theatrical and Television cinematographers filming 16mm, 35mm or 65mm anamorphic or spherical motion pictures in any aspect ratio, in color or black and white, silent or sync-sound, in the studio or on location.

An Official Publication of the

#### AMERICAN SOCIETY OF CINEMATOGRAPHERS

Dealers are invited to write for quantity discounts.

## AMERICAN CINEMATOGRAPHER MANUAL

COMPILED AND EDITED BY
TWO VETERAN CINEMATOGRAPHERS

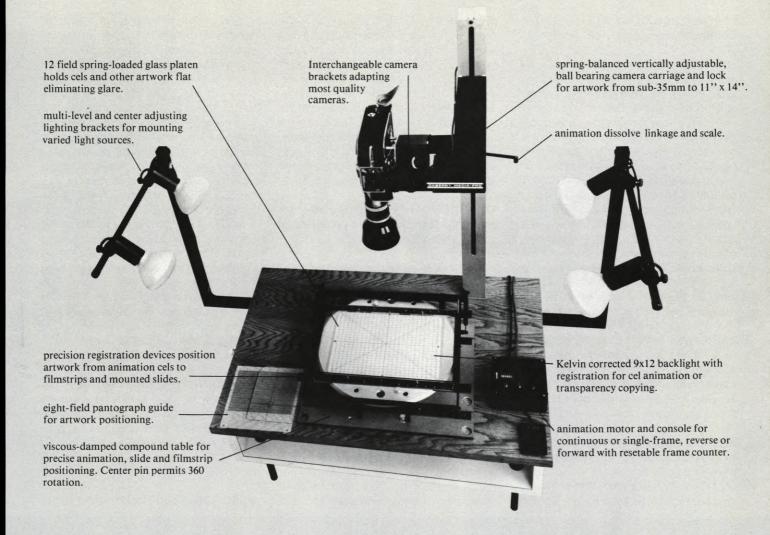
CHARLES G. CLARKE, A.S.C. and WALTER STRENGE, A.S.C.

This easy-to-carry, pocket-size, concise, book contains practical, informative text, tables, charts, diagrams, drawings and listings of all the latest production equipment and filming techniques in use today!

Key word printed on the edge of every righthand page provides INSTANT INDEX for quickly locating desired data!

THE AMERICAN	CINEMATOGRAPHER	MANUAL
P.O. BOX 2230		4TH EDITION
HOLLYWOOD, CALI	FORNIA 90028	

Please send TOGRAPHER MA handling fee. No (	_copies of the AME ANUAL @ \$18.50 C.O.D.'s.	ERICAN CINEMA- each, plus \$1.00
NAME		
STREET		
CITY	STATE	ZIP
California residents p Foreign Buyers pleas Funds.	please remit 6% Sales T se pay by International	ax (\$1.13 per Manual). Money Order or U.S.



# Oxberry Media-Pro Plus...



#### ... Equals Media Versatility

The OXBERRY MEDIA-PRO PLUS is designed for the in-house producer who requires multi-media versatility at a low initial cost.

Think about it . . . one multi-media system that will turn out professional media communication in 6 media formats. A "media pro" with many features some new and unique to the MEDIA-PRO and some old OXBERRY favorites developed over 25 years of media industry experience. Take a look at . . .

. . . the viscous-damped compound movement; essential for life-like moves in filmography/videography and invaluable for fast and accurate copy photography.

. . . the animation type, moveable peg registration for highly accurate art placement from cel animation through 35mm

macro-copy photography.

. . . the Kelvin corrected cold backlight which covers evenly 12+ fields and up to 16 x 20 on opaque copy.

. . . the multi-camera design that adapts five MEDIA-PRO camera systems to a common optical center. The basic stand also mounts most other fine still, motion, and video cameras. . . . the extensive line of supplies and special production accessories bracketing the entire audio-visual field.

For more information about the MEDIA-PRO PLUS and other OXBERRY systems write to:



Division of Richmark Camera Service 180 Broad Street, Carlstadt, N. J. 07072 Phone: (201) 935-3000 Telex: 133509 Cable: Oxberry Carlstadt N.J.

#### "THE ICEMAN COMETH" Continued from Page 169

shot two ways. To me, it's always a lot more interesting just to see something slide a little bit; then you know you're moving and you're curious. You don't want to feel that you're sitting way back, just looking through a telescope to get close to the man across the set. You're curious. You want to get on in there with that camera. You can shorten the move by changing the magnification along with the movement. The stop we were using worked out very well. I think it was around T/5 or T/5.6. That gave us plenty of depth of field, which helped with the concept we had of keeping the geography in the same relationship all the time. On a few occasions, when we had to use the split field or the diopters, it was only because we felt we needed to have a wider shot on both ends. In fact, once or twice we were a little too sharp on some of the actors in the foreground. A close subject tends to look sharper, anyway. In looking at this print today, I felt again that the detective who turned into the camera in the close foreground was too sharp. Actually, he turned farther than expected. I didn't know until the next day, when I said to the operator, "My God. If I had known that he turned around so far, we would have done it over." But you don't always see the nuances, especially with more than one camera. You just have to rely on your operator. One of the best operators in the business was on that particular camera. The actor turned around—Freddy March is sitting off looking at the camera. This guy turns around to throw a line to someone and he just went too far. To me, it's drawing too much attention to him, even though he's speaking. But the detail is really objectionable.

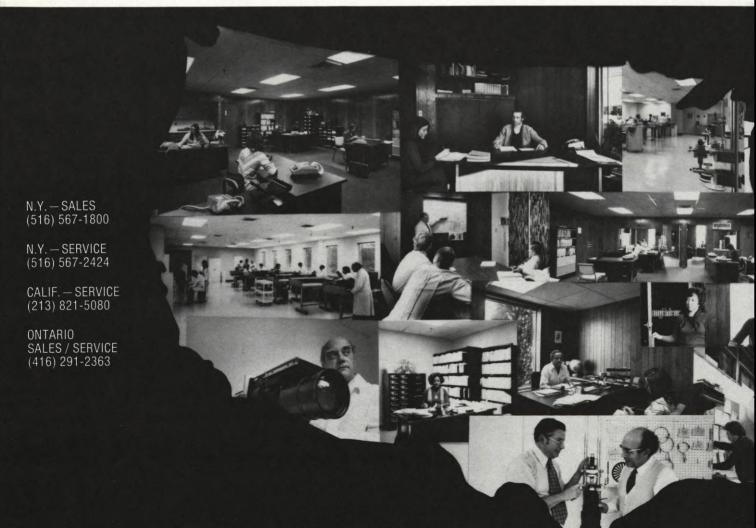
# QUESTION: Can you tell us a bit more about the techniques and problems of using split-diopters?

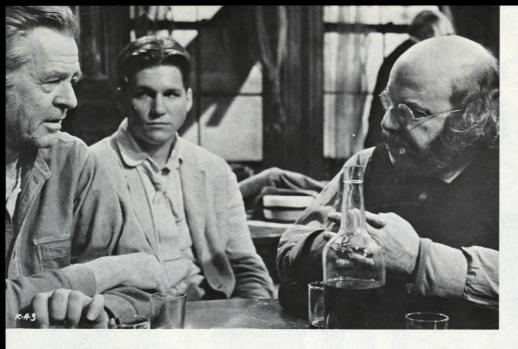
WOOLSEY: We did a lot fo split-diopter work in "THE NEW CENTURIONS". where we shot much of the night car scenes at T/1.4 in the anamorphic process. There isn't much depth of field at T/1.4, believe me, particularly with a 40 or 50 millimeter lens. It meant that Stacy Keach and George Scott, who were the principals riding in the squad car all the time, had a split-diopter between them. (We had to watch carefully so that one of them would not lean across the line. A rapid movement across the line and back would be O.K. But occasionally one of them would lean too far.) We set those diopters so they weren't quite sharp on the foreground man and that looked better. And the same operator I mentioned before was with us all the time during all the runs we made around the streets, which went on for 40 nights. He moved that diopter a few times-even changed the angle of it to work the scene. So we always knew exactly what was going on. Often you have to send a camera out on a car without an operator. Maybe there are only a few scenes and it doesn't pay to build a big mount. So you attach a camera and, if necessary, use the split-diopter with the person in the foreground in focus as much as you want. Then you don't know until the next day whether he stayed where you told him to. When you're shooting wide open like that, you can count on the upstage actor staying pretty much in focus. He won't move too much, especially if he's behind the wheel. But the person close to the camera may very easily, by just moving two inches, either get too sharp or get too soft. It's a gamble.

QUESTION: You described your device where you had the camera mounted so that it could go along the table. Do you also use that in conjunction with the regular dolly?

WOOLSEY: Yes.

QUESTION: I don't understand it.





WOOLSEY: It's a missile-tracking mount that was made by O'Connor, who, of course, makes a lot of camera fluid heads. It is a fluid head that was made when they used to track missiles manually with very, very long focal-length lenses down at Cape Kennedy. The mount has a fluid rotating member. Then off this comes an arm which drops down to a platform which can be raised or lowered, and you set the camera on there. There are no springs or torsion

bars-you just get the CG of the thing balanced, moving the camera back and forth on the platform, and when you get it at just the right height and at the right fore-and-aft, you can simply rotate the mount in perfect balance to any tilt angle through 360°. "No springs, honest weight," as the old scale manufacturers used to say. I started using it because I ran into a lot of commercial situations where I had to shoot straight down through ceiling fans and maybe straight up and occasionally at extreme angles like that. And this mount really did the trick. It takes up to a 200-pound camera. It also has another advantage. Even though you put the platform at the bottom where the thing isn't quite neutral balance, the bottom of the camera canbe right on the ground or on the table-top or whatever. For mobility I use it on the dolly or the crane. You can't get the lens any lower than when the bottom of the camera is at ground level, even with a mirror-periscope device.

#### QUESTION: Doesn't that create problems when you pan through?

WOOLSEY: Yes. The offset mount describes an arc. What happens occasionally is, you lay out a great shot, where along the floor you follow the feet along and then you just raise the whole thing up or tilt it or whatever. Now the director's so enamored of it he says, "Ah . . . Now let's just follow them around the set." That gets a little tricky. The difficulty is "Where do you put the operator?" on these shots. The Panaflex has been a great boon. On "THE ICEMAN COM-ETH" we made a lot of those shots going across bar tops and tables and the like; and the operator many times was lying on a piece of plywood on his side, look-Continued on Page 211



industries. We offer the knowledge, equipment and service thru a full spectrum of specialists involved in the communications field.

> andenieux corporation of america 1500 OCEAN AVE., BOHEMIA, NEW YORK 11716 • (516) 567-1800

1, RUE PEDRO-MEYLAN 1208 GENEVE / SUISSE TEL. (022) 35 60 00/35 60 09 TELEX 27 670 OPTIC CH

# "Damnation Alley" Very special optical effects by Cinema Research Corporation



Titles and optical effects 35mm and 16mm special effects 16mm to 35mm enlargements 35mm to 16mm reductions Film corrections



Research Products' optical printers Solutions to any visual problems

Ben Fuglsby, General Manager Peter Donen, Production Manager





Cinema Research Corporation 6860 Lexington Avenue Hollywood, CA 90038 (213) 461-3235 Cable: RESEARCH

# FOR SALE: SILENT GENERATOR TRUCK



This vehicle has been custom-designed for professional motion picture location work and accommodates electrical, grip, camera and lighting equipment. Vehicle is a 1968 Dodge with 400 amp battery pack built by Sweinhart Electric. Four-wheel drive, Warren hubs, 418cc engine, 45,000 miles. Generator charger on truck runs off engine. Electric trickle charger. Front cable wheels w/200' — 2° cable. 2000 lb. electric lift gate, 3 ton rear end, 1½ ton front end, 2 ton rating. Truck has new tires and new vacuum brakes. Weighs 13,000 lbs. empty, has four forward gears w/transfer, high-low range, total eight forward gears. Two-side loading doors, shooting platform on top.

PRICE: \$21,500.00



Generator control panel bus bar connections.



Left side of truck showing general storage and generator battery storage areas.



Rear view of truck showing 6' x 8' x 2000 lb. lift gate.

SERVING THE WORLD



HOWARD A ANDERSON CO.



CREATORS OF DISTINCTIVE IDEAS AND DESIGNS FOR SPECIAL PHOTOGRAPHIC EFFECTS FOR MOTION PICTURES AND TELEVISION

TITLES - GRAPHICS - MINIATURES **BLUE BACKING - INSERTS** MATTE PAINTINGS - OPTICALS SPECIAL UNIT PHOTOGRAPHY

Main Office: PARAMOUNT PICTURES 5451 Marathon Street, Hollywood, Calif. 90038 (213) 463-0100



#### STRAIGHT TALK ABOUT LENSES

#### A NEW CAMERA DOESN'T HAVE TO MEAN A NEW LENS

Your present lens can probably be converted to fit your new camera, at a fraction of the cost of replacing it. Even viewfinder type lenses can be converted to fit the new reflex cameras.

#### CHOOSE THE MOUNT YOU NEED:





**ECLAIR CA-1** 



STANDARD



CP-16R





#### AND HAVE US INSTALL IT ON YOUR LENS.

All mounts are precision manufactured of the finest materials available to original factory tolerances. Our skilled technicians can perform most modifications within one week. Prices vary with lens type and the mount desired. Call or write today for a quotation.

#### PROTECT YOUR INVESTMENT - Regular maintenance will:

- Protect your costly zoom lens from internal wear, 1.
- 2. Avoid costly breakdown during use, and
- Keep optical and mechanical performance at its best for maximum sharpness.

If it has been more than two years since your lens was checked, you should make arrangements to have it tested and serviced by qualified personnel. With 27 years experience on all types of motion picture optics, Century Precision Cine/Optics has the skill, facilities, and parts inventory to repair Angenieux, Canon, Zeiss, Schneider, Rank Taylor Hobson, SOM Berthiot-Pan Cinor, and all fine cine lenses. That's why leading film producers all over the world choose us for their optics servicing.

With FREE ESTIMATES, fast service, unmatched experience, and competitive prices, you cannot afford to trust your lens to anyone less qualified. IT COSTS LESS TO DO IT RIGHT. We will gladly answer any questions about optical conversions and lens servicing.



TELEX: 66-2419

(213) 766-3715

# MAKE YOUR 10 x 12 or 15 x 10 A WIDE ANGLE ZOOM with the

# angenieux retrozoom attachment

10 X 12

15 X 10

12-120mm f/2.0	10-150mm f/2.0
CONVERTS TO	CONVERTS TO
FL: 9-90mm f/2.0	FL: 7.5-112 f/2.0
MOD: 30 inches	MOD: 12 inches



The Angenieux 0.76X Retrozoom front mounted attachment is designed to create a very wide angle zoom lens without altering the geometric aperture. In addition, this easy bayonet mounted accessory also provides images of the highest magnification.

# angenieux corporation of america

1500 OCEAN AVE., BOHEMIA, NEW YORK 11716 • (516) 567-1800 13381 BEACH AVE., VENICE, CALIFORNIA 90291 • (213) 821-5080 4 HAVEN HILL SQ., AGINCOURT, ONT. M1V1M4 • (416) 291-2363

#### TIFFEN

THE WORLD'S FINEST PHOTOGRAPHIC FILTERS.



# PROTECTIVE FILTER POUCH

This maximum security long wearing ruggedly constructed Naugahyde pouch is reinforced with a contrasting stitched Naugahyde binding. The inside is lined with 100% Nylon over foam cushioning for freedom from lint and super protection. A long life Velcro closure seals the pouch with a touch of the finger, thus eliminating the potential damage from old fashioned pressure-snap closures. Sizes to fit: 3x3 and Series 9, 4x4 and 41/2" round, 5x5 and 138mm round, 5x6, 6x6, and 6.6x6.6.



#### **VIEWING FILTER**

Permits the visual interpretation of shadow and highlighted details corresponding to the film's emulsion. Color and b/w types available; interchangeable filters. With neck chain; pocket case.

No. 1 Black and White Viewing Filter 90/50.

No. 2 Color Viewing Filter ND 2:0. No. 3 For faster color films and lower light levels.

Other densities & replacement glass available on request.



#### PROFESSIONAL RUBBER LENS SHADE

This shade, designed for heavy duty use, is made from a specially formulated rubber compound and is engineered to meet the rigors of all weather shooting. Highly protective of lens, it collapses easily for storage. Circular molded light baffles eliminate extraneous reflections and flare. Available in 86mm, Series 9 and 9 WA, 4½" and 4½" WA.



#### FLUORESCENT LIGHT FILTERS FL-B FL-D

Two Color Correction Filters designed to give accurate color renditions with average fluorescent lighting. Eliminates the deep blue-green cast ordinarily resultant from shooting color films with fluorescent lights. Can be used with the broad soft illumination of overhead and desk-type fluorescent lamps without regard to daylight, cool white or warm white rating of the lamps.

# TIFFEN

71 Jane Street, Roslyn Heights, N.Y. 11577 (516) 621-2700 Telex 96-7748







GENERAL ENTERPRISES, INC. 10518 Detrick Avenue • Kensington, Md. 20795 U.S.A. • Telephone: 301 942-1170

In Canada: Kingsway Film Equipment Ltd., 821 Kipling Ave., Toronto, Ontario M8Z 568

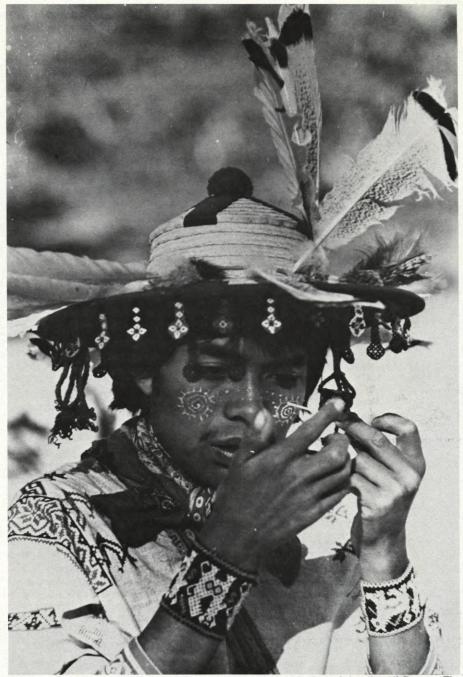
## "HUICHOLE: PEYOTE PEOPLE" Continued from Page 149

struck by sudden panic. Everything started to rush. I don't know why. I lay down and looked up at the sky; fleecy, white clouds were floating in a blue ocean. The branches of a huge pine tree spread out like a protecting umbrella over my head. I closed my eyes. When I opened them again, I felt calm and relaxed. I got up and looked at the footage counter on the camera. There was a little film left, so I started shooting until the film ran out.

I walked over to Kal. He asked me how I felt. I said, "Pretty spaced," and he said he felt the same way. Some Huicholes were getting really wild. I started to film with the Bell and Howell; suddenly a Huichole loomed into the viewfinder, a fist shot out; I felt an impact on my forehead. I looked at the camera as the Huichole staggered away. The lens turret was knocked off center, but the lens glass was okay. I thought to myself, "Better steer clear of that Huichole!" I was surprised, though, at the calmness I felt. An intuition hit me-the different Huichole people are just acting out what they really feel toward us-some like me, some don't. The peyote is just intensifying their feelings. (Several times we had cans and bottles thrown at us, even though we had permission to shoot.)

Now an extraordinary feeling came over me. I felt I was watching myself from outside my body. I tried to make a mental note of this feeling of duality; this feeling of being simultaneously "in and out of phase." Much later, when we cut the peyote ceremony section of the film, I tried to recall what the peyote felt like, and to edit in this duality of "objective" and "subjective" reality. This, I hope, is achieved by using slow motion, alternating the film perspective from observer to participant in cutting, and by using intervals of solarized color effects to depict the hallucinogenic changes.

On expanding on the idea of capturing the reality of an hallucinogenic experience we brought the problem to some of the lab people at CFI in Los Angeles; this was done through our agent in L.A., Mr. Jack West. What they were able to do with slow motion and some optical effects, plus alternating solarization at the end and head of specific dance scenes during the peyote ceremony ... what was rendered was a true capturing of the reality of the drug experience for the viewer. The edited sequencing of events plus the use of the Moog synthesizer give the feeling of hyper-color reality; and it is very close in sound, feeling and action to the actual field reality. This sequence in the film lasts for about three minutes, but



(ABOVE) A young Huichole man painting his face in the design of the sacred Peyote. The designs are preserved from Aztec days. (BELOW) Cinematographer Melville See records a scene with his trusty hand-held Bell & Howell 70-DR camera and wide angle lens. The aim of the production was to capture on film the intimate happenings of day-to-day living, as well as a complete record of all major Huichole festivals.







(LEFT) Elaborate face painting accompanies the Ceremony of Peyote. The vivid and intricate design attracts the gods to listen to the prayers of the people. (RIGHT) The ritual drink of Peyote, which produces sacred visions. Because of the uncertainty of attaining a successful corn harvest, the Huicholes employ an elaborate ceremonial cycle to enlist the help of the gods. The forces of nature—wind, rain, fire and sun—are diefied and then brought into an accessible realm through ritual worship. The Huicholes' fundamental unity with the natural world is a rare phenomenon today.

to me it is one of the most interesting general effects I have ever seen in a film of this type—or any other type, for that matter

To film the larger ceremonies, long negotiations took place with Huichole chiefs and medicine men (marakames). During these ceremonies, many religious rites are performed which are sacred; until respect was won, the photographers were not permitted to film them.

There was no script for shooting and subjects were not directed. Everything that happened on film was the actual reality of the situation. There were no retakes; if something occurred and was missed, it was irrevocably lost! Gradually, the cameramen were able to anticipate good film action and were ready when that moment came.

Since the film covers activities that span a year, the shooting phase lasted about eighteen months. Thirty-five thousand feet of film were exposed over the widest range of lighting situations. Southerly latitudes at alpine elevations produced high contrast.

Film was logged according to time and action. Batches of exposed film were flown out of the mountains at regular intervals and developed in the States. In this way, film was monitored for exposure.

Arter all is said and done, we have had a great deal of help from the people at the lab, and some of the other fine technicians associated with our production. The film was continuous work in the editing stage. Because we put much of the film together there, our ratio wasn't that high for this kind of film, even though it is a natural documentary, and in such a film the ratio usually builds to enormous pro-

portions.

As I remember, I believe we were shooting at a ratio of fifteen-to-one, and now we have a unique one-hour documentary for TV and educational purposes. In fact, the Smithsonian Institution has the whole of the footage available for scholars to study, and we provided this to them at no cost. Of course, we did demand that it remain there and that no duplication take place.

At the moment we are in the distribution stage and our associate producer will handle that particular job for our partnership and the Indian tribe itself, which also has a piece of their own film.

My passing comments on producing

this film are basically that the producer should have some active role in the production, especially if there is no real director. If the producer does take an active and creative role, the chances are far better that the final result will be a real success. The two years of making this film, with its constant problems, are totally dismissed when you see the final print on the screen. Of all the media in the world, and I do work with color tape (video), I will pick film 100,000 times to 1 ... for impact and artistry, illusion and life. Some parts of the visual media cannot be taken over by tape, I suggest that any cynics or critics see our film . . . then let's debate. ■

Mel See and Huichole Indian load a camera case onto a burro. The film provides a glimpse into pre-Columbian culture, a culture that is rapidly vanishing. The producers have donated to the Smithsonian Institution an unedited workprint of all footage shot of the Huicholes. (Photographs by Melville See and Dr. Kal Muller.)



## PHOTOGRAPHING "F.I.S.T." Continued from Page 145

that supposedly take place in February and March. It has been very bizarre, because instead of waiting for sun, we have been waiting for clouds—and getting them.

But now it appears that our luck may finally have run out. We are ready to shoot our big daylight strike sequence and there is nothing but blazing sunlight, perfectly blue skies, and not a cloud in sight. If we shoot with all this sun, it will look like California or Miami or Hawaii. The result will go completely against the grain of the story. But we are under intense economic pressure. We have ordered four or five hundred local extras (at the same high rates extras get in Hollywood) and we can't really afford to wait for overcast.

We try to waste a little time on the morning of the first day, hoping that by 10

or 11 o'clock, when the extras have been blocked and rehearsed in their action, the sun will get lost. I even find myself talking slower and slower, trying to hold back time, but there's not a single cloud. The sky is like California blue cardboard. It's horrible!

We break for lunch and hold a conference to decide what to do. They ask me what I think and I say, "We've agreed on the concept of shooting our daylight sequences only in overcast." They say, "But we don't have overcast. This sequence is going to take five or six days to shoot and we could be sitting here for weeks. Can you guarantee us five or six days of overcast?"

With the sun beating on my back, I say, "Can you guarantee us five or six days of sunshine? Why not shoot around it? Can't we do something else." And they say, "No, we can't do something else. We've got four or five hundred extras on the payroll. We have to start shooting."

It was obvious that the ewas no alternative, but I said to Norman Jewison, "Promise me one thing—that if we start shooting in sunlight and it turns overcast, you'll let me shoot everything over again like nothing ever happened, and just go for it."

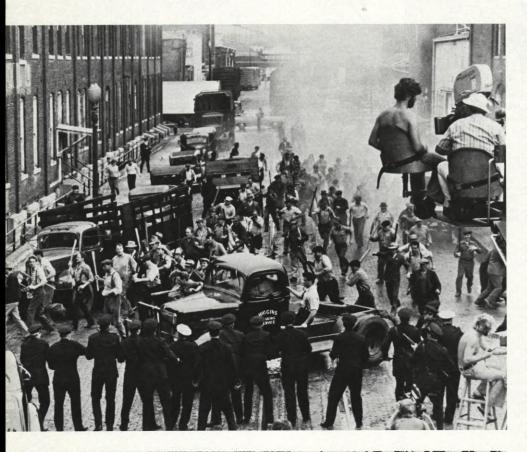
We shot several set-ups that afternoon in bright sunlight, but the next morning there was the most beautiful overcast—everything totally socked in. We reshot the scenes we'd done and just kept going on and on. It was terrific—an ideal background for the violent action. It was a great piece of luck—and you really need luck when you're dealing with daylight exteriors.

After that second strike sequence, the story jumps forward 20 years, and that presented a major problem for me. The first half of the picture had been dominated by greed, anger and violence and we had concentrated visually on earth colors. There were no reds, no blues, no primary colors.

But now it's 20 years later. The characters have aged. Their wardrobe and makeup are different, and there is a totally different level of intensity to the dramatic aspects of the story. I wanted the photographic style to change accordingly, but I still wanted to maintain some visual relationship between the first half and the second half. I didn't want to have the audience feel like they were watching two different movies.

To help solve the problem, we decided that in the second half, the male characters, now mostly on the executive level, would be shown in dark gray or navy blue business suits, with no other colors prominent—and it worked.

In the filming of "F.I.S.T." instead of using overall diffused soft-light, I had the





opportunity to get back to using hard directional lighting, the kind of controlled lighting that serves to reveal or emphasize what you want the audience to see. I feel that it was the right lighting style to hold the picture together organically, in the visual sense. I think it really works.

In the second half of the picture there are no huge crowd sequences, except for the one in which the main character, played by Sylvester Stallone, becomes the head of the nation's most powerful union. For that election sequence they gave us 1,000 extras—but only for one day. For that reason, we used two or three cameras to shoot most of the action.

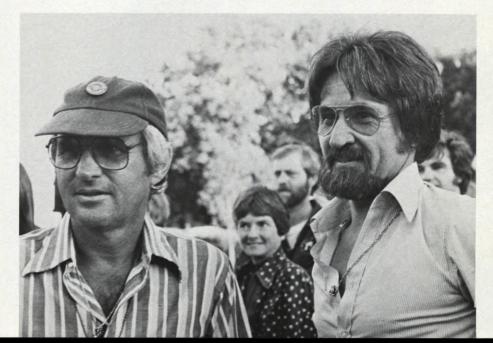
My working relationship with Norman Jewison on this picture was a very close one, and I feel that there must always be a close relationship between director and cinematographer. The cinematographer has to be tuned in completely to the director's concept and understand what is really transpiring in his mind. It's so difficult to communicate ideas that my main objective, when starting a film, is to find out how the director sees the story, how he intends to interpret it dramatically and how I can help him in doing that. I don't want to go my own way, because I respect the fact that film is always a director's medium. That's especially true today when so many directors function as auteurs. They often conceive the idea, write the script and live with the project for many months, or even years.

The cinematographer usually comes onto the picture only two or three weeks before shooting begins and we are incredibly handicapped when we start on a project, because we are so far behind everybody else. So the relationship with the director must remain close on a dayto-day basis. It's not enough to sit down with a cup of coffee and let the director tell you what the film is about. It's a daily process of finding out what he's trying to do with a scene, where he sees the dramatic moments and where the scene is going to peak dramatically. It is only in this way that your lighting, compositions and camera movements can organically serve the performances. The director conducts the whole orchestra, and the rest of us are his musicians. We have to hit the same notes; we have to play the harmony.

On a daily working basis, the cinematographer must remain as physically close to the director as possible, even during rehearsals or when he's trying to outline a scene for the actors. By listening to what the director is telling the actors—how he sees the characters, how he interprets the relationships—I get Continued on Page 204







# THE VITH TEHRAN INTERNATIONAL FILM FESTIVAL

Wisely cut back in scope for more efficient manageability, but boasting a roster of exceptional films, this latest film event turns out to be the best-organized and smoothest-running yet

#### By HERB A. LIGHTMAN

#### TEHRAN, Iran

Arriving at the Tehran airport, I am ushered immediately to the special Film Festival desk, where the uniformed Festival personnel, always extremely friendly and courteous during the past four years that I have been coming here, seem even more so this time around.

One of them requests my passport, and within five minutes, I have bypassed the usual Immigration and Customs formalities (without waiting in any lines) and am being escorted to claim my luggage. It is by far the smoothest rite of passage I have yet experienced here.

At the Hotel Intercontinental, official headquarters for the Festival, the check-in is equally quick and painless. This year, in an innovative change of policy, all of the vital elements of the Festival have been centralized at the Intercontinental, which is located conveniently close to the complex of theaters where the films will be screened. All of the invited guests are being accommodated in this same comfortable hostelry—but more than



that, such facilities as the Press Center, Conference Hall, Travel Desk and Hospitality Service (in previous years, located in a separate building in downtown Tehran) have also been concentrated in this one place, in order to minimize having to cope with the everincreasing Tehran traffic. Only the Jury members and those who have come here primarily to attend the Film Market are quartered at the much-farther-distant Royal Tehran Hilton Hotel.

There are other fundamental changes, too. My old friend Hagir Daryoush, for the past four years the super-hardworking Secretary-General (or "bossman") of the Festival, has finally been given a merciful respite from this weighty responsibility—although he is still intimately involved with the event as Advisor and Jury member for Iran. Accepting the chore of Festival Managing Director this year is his former deputy, the affable and quietly efficient Houshang Shafti.

The hoped-for move of the Festival to Isfahan this year (to avoid Tehran traffic) has, unfortunately, not materialized, due to the enormous (and, as yet, unsolved) logistical problem of moving hundreds of guests arriving day and night, from Tehran to the smaller

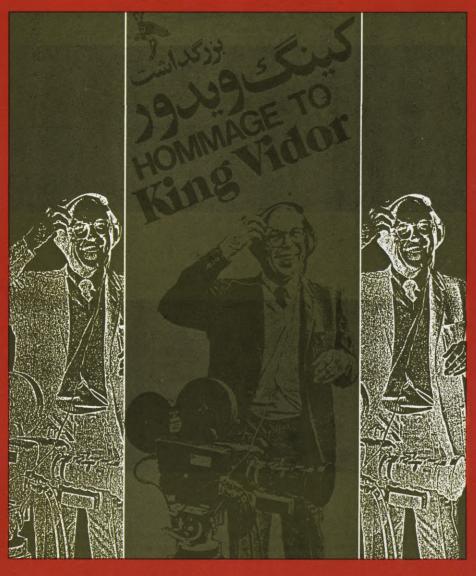




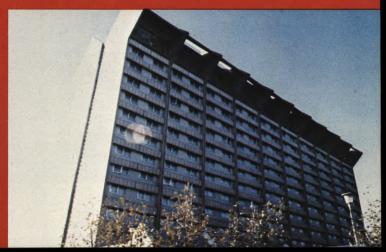
city. Since nothing can be done to stem the flow of automobiles that engulfs this booming metropolis, the Festival management has moved to make sure that guests do not miss screenings because of the bumper-to-bumper traffic. Shuttle busses leave the hotel one hour prior to all screenings, and they are waiting outside each theater at the conclusion of screenings. To further ease the situation, three out of the four theatres are within easy walking distance of each other (two, in fact, in the same building). The fourth theater, the newly refurbished Diamonde, is the "showcase" house, reserved for invitational screenings of the films in the "Competition", "Festival of Festivals" and "Cinema Has Eyes and Ears" categories.

To further ease the problems attendant to staging a comprehensive film festival in a city that grows more crowded each year, the list of invited guests (often running as high as 500 in past years) has been cut back to a far more manageable 175. The emphasis this year is on fewer guests, but more and better services—a decision which is to prove to be a very wise one.

As far as the films to be shown are concerned, the line-up appears to be most promising. In addition to the aforementioned three major categories, there is "Homage to King Vidor", a retrospective of a dozen films in tribute to the dean of American film directors, "Iranian Films and International Festivals" and "A Tribute to American Musicals", comprised of









Houshang Shafti, Managing Director of the VIth Tehran International Film Festival. Assuming leadership of this complex event for the first time, and very late in the year, he did a remarkable job of coordinating its myriad facets and getting them to run smoothly.

24 of the best of this unique cinematic art form.

My one personal disappointment is the fact that there is not a single American film entered in competition this year. Having vainly attempted to aid the Festival management in securing such films, I know that the omission is not due to lack of trying. One reason is that there are five major film festivals scheduled at almost precisely the same time-all in hot competition for Hollywood's dwindling product. Another reason (although they would never admit to it) appears to be the feeling on the part of certain producers that they are unwilling to have their films compete unless they are reasonably assured of winning. Still other producers (such as those of "JULIA" and "CLOSE ENCOUNTERS OF THE THIRD KIND") simply refuse to allow their films to be screened in any festival.

Still, there is a certain consolation in the fact that the VIth Tehran International Film Festival opens with the magnificent Herbert Ross/20th Century-Fox production of "THE TURNING POINT", screened out of competition at Rudaki Hall. A film with both a high degree of artistry and popular appeal, it seems to be the ideal choice to inaugurate the event and is warmly appreciated by the elegant first-night audience.

With the Festival now in full swing, I plunge into my usual orgy of wall-to-wall film-watching, often viewing as many as five feature screenings in a day. Still, in only 12 days, it is impossible to see more than a third of the 150 features presented in the main programs. The lavishness of Iranian hospitality is legend and there is the usual non-stop round of parties, luncheons, cocktail receptions and spe-



At a seminar on special effects held for Iranian cinema students, Dr. Mehrdad Azarmi, film advisor to the Ministry of Arts and Culture (and himself a noted special effects expert), introduces Charles Schneer, American producer (with Ray Harryhausen) of such fantasy features as "THE SEVENTH VOYAGE OF SINBAD".

cial entertainments arranged for the guests. However, I have long since found that I cannot be a social butterfly (contrary to my nature, at best) and simultaneously do justice to the film viewing—so I opt for the films, except for attending the formal banquet hosted by His Excellency, Mehrdad Pahlbod, Minister of Arts and Culture, at the Hilton, and some evenings later, a private dinner party at his architecturally stunning palace.

Social or not, however, I always find my annual visit to Tehran to be a time of happy reunion with old friends. Among those who live here and who extend a

The hospitality of Iranians is legendary and the lavish entertainment provided for guests of the Tehran International Film Festival has become a tradition. Shown above are Iranian musicians and dancers, garbed in national costume, who performed for guests at an official welcoming banquet held at the Royal Tehran Hilton Hotel and hosted by His Excellency Mehrdad Pahlbod, Minister of Arts and Culture.









(LEFT) As is the custom in Tehran, bouquets are presented to James McElroy, producer of the Australian feature, "THE LAST WAVE", and star of the film, David Gulpilil, following the picture's official public screening. (RIGHT) In a wise move to consolidate Festival activities, press conferences (such as this one with the Festival Jury) were held at the Intercontinental Hotel.

warm welcome are: Bahram Reypour (functioning again as Festival Press Officer), Houshang Baharlu (the local film industry's outstanding young cinematographer), and Dr. Mehrdad Azarmi (special film Advisor to the Ministry of Arts and Culture).

From America there are: Kevin Thomas, distinguished film critic of the Los Angeles Times (and the American member of the Jury this year), famed star of stage and screen musicals Ray Bolger and his charming wife (here to add zest to the retrospective of American film musicals) and fantasy film producer Charles Schneer ("SINBAD AND THE EYE OF THE TIGER"). American film stars attending toward the end of the Festival will include Anthony Quinn, Jennifer O'Neill and Michael Sarrazin, all of them starring in Elmo Williams' production of "CARAVANS", which has been shooting outside of Isfahan.

I am very happy to encounter Australian producer James McElroy, who, with his brother Hal, turned out the phenomenally successful "PICNIC AT HANGING ROCK". We had met during my last trip "down under" a couple of years ago and it's a pleasure to see him again. He is here in conjunction with the screening (in competition) of their new production, "THE LAST WAVE" and I'm very eagerly looking forward to seeing it.

During the course of my non-stop film viewing, I am amazed to note how many features from various countries are based on the problems (amorous and otherwise) of adolescents. In the past, this cinematic preoccupation with youth has been an almost exclusively American one, but finally the rest of the world seems to have discovered young people,



(ABOVE) At the banquet which he hosted for Festival guests, His Excellency Mehrdad Pahlbod, Minister of Arts and Culture, and his daughter, Princess Sharazad, chat with Los Angeles Times film critic, Kevin Thomas, who served as the American member of the Jury. (BELOW) Jury members present at the Closing Ceremony Awards Presentation included (left to right): Jiri Menzel (Czechoslovakia), Nikita Mikhalkov (U.S.S.R.), Roy Boulting (United Kingdom), Kevin Thomas (U.S.A.), Olimpia Carlisi (Italy), Susumu Hani (Japan) and Hagir Daryoush (Iran). Unable to be present was Nelly Kaplan (France).



Continued on Page 208

## "THE WIZARD OF OZ" AND THE GOLDEN ERA OF THE AMERICAN MUSICAL FILM

#### By RAY BOLGER

A backward glance at an exciting time in Hollywood history, and the filming of a classic musical still dear to the hearts of audiences

(EDITOR'S NOTE: The following observations have been excerpted from interviews with and comments by famed musical film and stage star Ray Bolger during his recent appearance as honored guest at the VIth Tehran International Film Festival. Among his many screen roles during the "Golden Era" of the American Film Musical, Mr. Bolger created that of the lovable Scarecrow in the 1939 MGM production of "THE WIZARD OF OZ". Directly prior to leaving Hollywood for Iran, Mr. Bolger completed a straight dramatic role in a "BARETTA" segment under the guidance of Iranian director Reza Badiyi.)

During the early Thirties, Forties and Fifties-the so-called "Golden Era" of American musical film production—the prime requisite at such studios as MGM, Warner Bros. and RKO was not so much money as time. The idea was to get as close to perfection as possible on the screen and that required time. Invariably, those of us who performed in films were under contract to the studios and that meant that we had a five-day week in which to prepare our numbers and scenes and get them organized toward that goal of perfection. Fred Astaire was the great perfectionist, as far as dancers were concerned, closely followed by Gene Kelly.

When you stop to think of the various aspects involved in putting a musical production together—the hours of rehearsing, the hours of special material being written, the hours of coaching that were necessary—it becomes obvious why the time element was so important. Translated into cost factors, it is also the reason why films of this type are almost never made anymore.

But in those days, MGM had in its "stables" the greatest actors and technicians that money could buy. Whether they needed them or not, they bought them and they could afford to give these contract people the time to prepare for complex musical productions. That time (because of high costs) is not available today. The actor is in a different position now. He can't really have a home if he wants to be part of the modern film industry. He has to keep his bags always packed.

During those golden days we did not have the lightweight, portable filming equipment that makes location shooting so prevalent now. The great musicals were made exclusively on studio sound stages and backlots. A musical was a musical. The audiences went to hear music, to see beauty and to laugh at

comedy. The producers hired the greatest dancers in the world. They would get someone like Bill "Bojangles" Robinson to dance with Shirley Temple and create an attractive, charming thing. Or they would hire a fellow like myself to do the kind of comedy dancing they wanted in a picture.

Story lines were kept simple. They rarely became more complex than boy meets girl, boy gets girl, boy loses girl, boy gets girl again. People like Busby Berkeley created complex musical numbers, but not much of an attempt was made to really integrate them with a story. The basic message of the classic American film musical was: "Look for happiness in a musical comedy. Banish the gray skies. Look for the blues skies. Forget your problems. Let me sing you a song that will make you happy. Let me do a dance step that you can go home and show to your friends."

It was all very simplistic, and yet those musicals provided more beauty and sheer entertainment than any other type of films that have ever been made.

Today a dance has to have "meaning"; it has to be an integrated part of the story—and it's quite possible that I was guilty of helping to start that trend when I worked with George Balanchine in staging the "Slaughter on Tenth Avenue" ballet in the musical "On Your Toes" on Broadway. Working together, we brought to Broadway the first ballet that was an integrated part of the show, but I say proudly that my association with Balanchine was one of the most rewarding experiences that I've ever had in my life.

However, having come from the Broadway stage, where I created everything myself, I found it difficult to adapt to the regimentation of the film medium, of having to hit a little chalk mark on the set in order to end up before the camera in a closeup. This didn't give me the sense of freedom or release that I liked to have. I wanted to roam and let the camera find me, instead of me finding the camera. I've learned in recent years, and from doing drama, that it's not a matter of hitting a mark, but of moving in closer to capture the peak of an emotion.

People like Berkeley managed to get a great sense of pace and movement into film productions by shooting a musical number 20 times from 20 different angles and employing intricate boom shots, but audiences don't want to see that type of

thing anymore. The intimate musical, too, is a thing of the past, because the music gets in the way of the story and the story gets in the way of the music. But looking back to the "Golden Era", one can point to MGM's "THE WIZARD OF OZ" as an ideal blending of story, music and fantasy.

The story on which the film "THE WIZ-ARD OF OZ" was based was written at the turn of the century by L. Frank Baum. It was made into a musical comedy in 1902, but although the book was in every home, nothing further of importance was done about it on the stage or in films until 1938, when MGM Studios decided to produce it as a screen musical.

The entire picture was made in the studio; we never went on location at any time. All of the illusions—the cyclone, the teacher riding the bicycle and the people rowing the boat in midair, the rubber trees that threw apples—were created by the MGM special effects department.

The picture cost more than \$2,500,000 to produce and distribute at the time, but I doubt if it could be made now for less than \$100,000,000. The studio had the finest technicians on its payroll during that period. It was the beginning of a new era in cinema.

As I understand it, "THE WIZARD OF OZ" property was originally bought by Samuel Goldwyn, who later sold it to Metro-Goldwyn-Mayer. It was dumped into the laps of the studio producers, who had to work with it because Louis B.

Famed star of the musical stage and screen, Ray Bolger, and his wife were honored guests at the recent VIth Tehran International Film Festival.



Mayer wanted the picture to be made.

There were many problems involved in the making of "THE WIZARD OF OZ". At one time or another it seemed like everyone in Hollywood was going to direct the picture. We had Richard Thorpe, who came in for a little bit, and George Cukor to replace him. Then finally, toward the end, King Vidor came in to film certain sequences. He was a dreamy man, very thoughtful and considerate, a director who knew what he was doing. But the director of credit, the one who did the majority of the filming, was Victor Fleming. We had an enormous respect for him, because the making of the picture required great discipline and this man was a disciplinarian. Not that he didn't have a sense of humor, but there was no time for jokes; there was no time to do anything but get the work done.

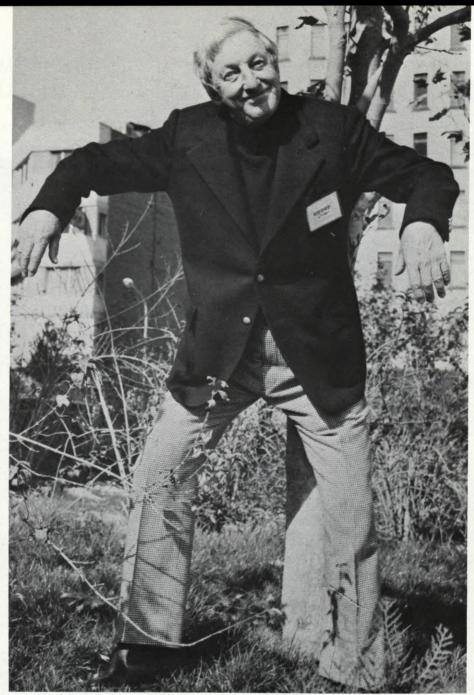
At first, Bert Lahr would not sign his contract to play the Cowardly Lion, because he wanted a six-week guarantee—not realizing that it would take him about six weeks just to put the costume on. Lahr was a constant worrier. It didn't make any difference whether things were good, bad or indifferent. The thing that frustrated him the most was that there were no buttons on his lion costume that he could twist off during the filming.

On the lot, at the time, were gathered the finest technicians that Metro could buy—which, I guess, were the finest that anybody could buy. Working at Metro-Goldwyn-Mayer during that period was the ultimate in motion picture-making, musicals or otherwise. It was like playing the Palace Theater in New York.

Jack Dawn was the head of the MGM Makeup Department and it took him some time to organize the extremely intricate makeups needed for "THE WIZARD OF OZ". Buddy Ebsen was originally scheduled to play the Tin Woodsman, but he finally did not appear in the picture because of some problem with the metallic paint they were using to cover his face.

The makeup had to be applied meticulously, so that it would match precisely from shot-to-shot and from day-to-day. For my role as the Scarecrow, for example, in order to create the illusion that I was in a burlap bag, they had to apply lines to match the rubber mask that went around my mouth and alongside my cheek and up over my head and down certain parts of the forehead.

The makeup experts had the enormous task of humanizing characters who weren't human at all—the Scarecrow, the Tin Woodsman and the Cowardly Lion. The makeup was more important than anything else and it had to be meticulously applied. That meant that we



To the delight of loyal fans in Tehran, Bolger strikes the loose-limbed pose he affected when he sang and danced "If I Only Had a Brain" as the lovable Scarecrow in MGM's 1939 classic musical film, "THE WIZARD OF OZ". Considered one of the Ten Best Films of all time, "OZ" is shown constantly on television world-wide.

had to spend a minimum of three hours in the makeup department before we ever reached the set. Then, when we did reach the set, we had to match everything that had been filmed the day before. In my case, the straw had to be precisely placed to match the way it was in the last shot we had made—but the very second that I moved, the straw would be dislodged. Perhaps no one would ever have noticed the difference, but that's the way they worked in those days.

The three of us couldn't go into the commissary to eat wearing our costumes, and it would have taken too much time to remove Lahr's 90-pound suit and all my straw and everything else. Also, there was the possibility that the strange

colors of our makeups would have made people sick to their stomachs. So the three of us had to eat together in a separate room during the six or seven months that we were doing the picture.

To further complicate matters during the filming, the script was constantly being rewritten, and everyone seemed to be doing the writing. Every day we would receive pages of new dialogue, as the result of something the director didn't like or had wanted rewritten. We were constantly in a state of flux, never knowing whether what we had prepared the night before would actually be shot or whether we would have to redo everything when we got to the studio the next morning.

The picture was photographed in Continued on Page 196

# AMARDS OF THE VITH TEHRAN INTERNATIONAL FILM FESTIVAL

The Jury of the VIth Tehran International Film Festival, composed of:

Roy Boulting (Britain), Olimpia Carlisi (Italy), Hagir Daryoush (Iran), Susumu Hani (Japan), Nelly Kaplan (France), Jiri Menzel (Czechoslovakia), Nikita Mikhalkov (USSR), Kevin Thomas (USA)

and presided over by **Abdol-Majid Majidi** (Iran) viewed 22 features and 22 short films in competition.

Before announcing the awards, it should be stated that, in their deliberations, the Jury did not achieve unanimity. Despite the friendship and the sympathy prevailing during their work together, at times individual members felt unable to compromise their aesthetic principles. The decisions of the Jury have, therefore, been reached by the vote of the majority.

#### SHORT FILMS:

 Diploma of Honour with Special Mention

to the Czechoslovak Film "Thank You Gentlemen" by VACLAV BEDRICH, for its witty critique of the contemporary evil of traffic congestion.

 Diploma of Honour with Special Mention

to the Czechoslovak Film "What Did We Do to the Hens" by JOSEF HEKRDLA and VLADIMIR JIRANEK, for its timely warning against tampering with nature, expressed in simple graphics.

 Special Jury Prize of Golden Ibex Plaque

to the Iranian film "Reminiscences" by KHOSROW HARITASH,

for its inspired choice of a particular to express the universal in focusing attention upon the importance of preserving a cultural heritage and the perils of losing it.

—Grand Prix of Golden Ibex Statue to the West German film "Smile" by PAVEL PROCHAZKA,

for its inventive use of animation and live action in exposing the folly of war.

 Diploma of Honour with Special Mention

to the Czechoslovak Film "Pink Dreams" by DUSAN HANAK,

for the tenderness, humour and sympathy with which it treats the experience of "young love".

- Diploma of Honour with Special Mention

to the Iranian film "Suteh-Delan" by ALI HATAMI,

for the richness of its imagery in its wistful evocation of a recent yet remote past and for the evenness of all its performances.

#### -Golden Ibex Plaque

to **TENGUIZ ABULADZEH** for his screenplay of the Soviet Film "**A Tree of Wishes**", for his pristine vision of a bygone era vividly brought to life through colorful characterizations that reveal the Film-maker's lyrical sensitivity and humanism.

#### -Golden Ibex Plaque

to **FERENC KALLAI** for his performance in the Hungarian film "On the Side Line", for his conscientious exploration of a character undergoing a profound inner evolution within a brief span of time.

#### -Golden Ibex Plaque

to MARINA DIMITROVA for her performance in the Bulgarian film "Manly Times", for her eloquent economy of expression in a role demanding a wide range of emotions.

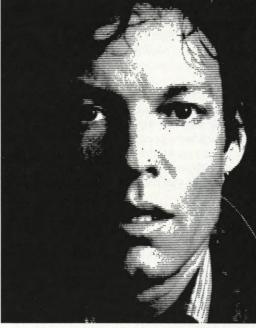
#### -Golden Ibex Plaque

to KRZYSZTOF ZANUSSI for his direction of the Polish film "Camouflage".

for his subtle and insistent observation of complex behaviour and relationships with moral implications that go beyond the academic world, which is the setting of the Film.

—Grand Prix of Golden Ibex Statue to the Australian Film "The Last Wave" by PETER WEIR

for the bold originality of its depiction of a cultural confrontation through which modern man's increasing detachment from his collective unconscious is revealed, and for the virtuosity of its visuals that are essential to evoking an alien super-reality.



(ABOVE) American actor Richard Chamberlain stars in the Australian feature, "THE LAST WAVE", which won the Golden Ibex top award of the VIth Tehran International Film Festival. (BELOW) Her Imperial Majesty, Empress Farah Pahlavi, gracious patroness of the Festival, presents the coveted Golden Ibex statuette to James McElroy, co-producer of "THE LAST WAVE".



## THE VIth TEHRAN INTERNATIONAL FILM FESTIVAL IN RETROSPECT

The Sixth Tehran International Film Festival officially ended at a closing ceremony in Rudaki Hall in the presence of Her Imperial Majesty, Empress Farah Pahlavi.

The highlight of the evening was the presentation of the festival jury's report and the award of prizes to competition winners by Her Imperial Majesty.

The Tehran International Film Festival is recognised by the International Federation of Film Producers' Association as a competitive event for features and short films, putting it on a par with such older festivals as Cannes and Berlin. This year the festival ran from November 15 to November 27.

The basic aim of the festival is to bring to the notice of the film world and the public, films of artistic value from both East and West in an effort to foster the humanistic elements in the cinema, and promote a better understanding between the peoples of the world. To this end the festival attempts to provide a forum for the exchange of views and constructive debate about the different aspects and problems of filmmaking today and facilitate the exchange of films on an international level.

This year 30 countries were represented in the festival and 150 films were shown in the main programmes open to the public.

In addition, over 100 features and short films were screened in 200 scheduled sessions during the 10-day period at the parallel film bazaar, which was attended by a total of 125 buyers and distributors from five continents.

The number of festival guests reached over 100, consisting of directors, producers, actors and actresses, critics and cineasts from 30 countries.

The countries taking part (in alphabetical order) were:

Algeria, Australia, Belgium, Bulgaria, Canada, Czechoslovakia, Denmark, France, East Germany, West Germany, Hungary, Iran, Italy, Japan, Jordan, Lebanon, Mexico, The Netherlands, New Zealand, Norway, Panama, Poland, Romania, Spain, Sweden, Tunisia, United Kingdom, United States of America, USSR, Yugoslavia.

#### **FILMS IN COMPETITION**

The 22 feature-length films competing in the competition programme were, in order of screening: "Boys" (Denmark), "Pink Dreams" (Czechoslovakia), "Report" (Iran), "An American Dream" (Sweden), "Sun of the Hyenas" (The

Netherlands), "The Summer I Was 15" (Norway), "A Tree of Wishes" (USSR), "Dites Lui que Je l'Aime" (France), "Xoxontla-the Burning Land" (Mexico), "Manly Times" (Bulgaria), "Crow" (Iran), "Valentino" (UK), "The Inugamis" (Japan), "Jambon D'Ardenne" (Belgium), "Nene" (Italy), "Death is My Trade" (Germany, F.R.), "Camouflage" (Poland), "Last Wave" (Australia), "Sutehdelan" (Iran), "Al di la del Bene e del Male" (Italy), "The Two of Them" (Hungary), "On the Side Line" (Hungary).

The 22 short films in competition were: "Night Life" (USA), "Challenge" (Germany, F.R.), "Ludwick" (Poland), "Flare-A Ski Trip" (New Zealand), "All During a Day" (Germany, F.R.), "Bass on Titles" (USA), "David" (The Netherlands), "The Lonely Persons' Club" (Hungary), "Thank You Gentlemen"

(Czechoslovakia), "Postman" (Iran), "The Barrier" (Poland), "Landscapes in Stamps" (New Zealand), "Two Stars" (USA), "Love Letters from Teralba Road" (Australia), "What Did We Do to the Hens" (Czechoslovakia), "Yarestan" (Iran), "Smile" (Germany, F.R.), "Retrospection" (Poland), "Reminiscences" (Iran), "Quotations" (Czechoslovakia), "Before We Wake Up" (Denmark), "Nightmare" (Yugoslavia).

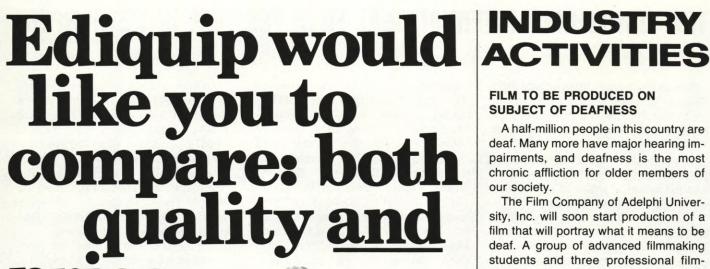
This section also featured two Hors-Concours presentations as follows: "The Turning Point" (Herbert Ross, USA) and "Slapshot" (George Roy Hill, USA).

#### **FESTIVAL OF FESTIVALS**

A documentation of honours that have been bestowed on some of the most outstanding samples of filmmakers' creative Continued on Page 206

From the stage of magnificent Rudaki Hall, Managing Director Houshang Shafti presides over the Opening Ceremony of the VIth Tehran International Film Festival. In only six years this festival has earned a reputation as one of the top film events of its kind in the world.







PLUS \$7.00 FOR 11 INCH SHAFT.

The complete line of Ediquip products is available at the best equipment dealers nationwide.

Send for a copy of our free Brochure!

6820 Romaine St., Hollywood, California

#### FILM TO BE PRODUCED ON SUBJECT OF DEAFNESS

A half-million people in this country are deaf. Many more have major hearing impairments, and deafness is the most chronic affliction for older members of our society.

The Film Company of Adelphi University, Inc. will soon start production of a film that will portray what it means to be deaf. A group of advanced filmmaking students and three professional filmmakers will travel to Connecticut and film on location "DADDY, CAN I HEAR THE SUN?" One of the more challenging problems that The Film Company will face is designing a film that communicates with deaf and hearing audiences.

Film communicates best on an emotional level and all audiences, both deaf and hearing, have a great understanding for the visual language of film. Minimizing the spoken word and including the use of "signing" as it would naturally be used, will give this film great meaning to both the deaf and the hearing, speaking audience.

Paul Pitcoff, President of The Film Company, is working closely with the Episcopal Churchwomen, Diocese of Connecticut, sponsors of the film, and Reverend Raynor Andersen who heads the Episcopal Missions for the Deaf of Connecticut. Paul, along with Marge Hudson and Len Price, who teach film and video production in the Department of Communications, Adelphi University, will provide the opportunity for the students who will accompany them to work at a professional level on the film.

The film team will live and work together for ten days in a close, professional atmosphere necessary to the kind of film production work that has resulted in the Academy of Motion Picture Arts and Sciences "little oscar", awarded for the Philadelphia Settlement Music School film "What The Notes Say", and best film award in the University & College Theatre Association Film competition for "They Care", produced for Catholic Charities of Nassau and Suffolk Counties.

The Film Company of Adelphi University, Inc., a non-profit organization, that provides professional films to the nonprofit community was founded by Paul Pitcoff several years ago. Since its inception, The Film Company has produced films for Catholic Charities of Nassau and Suffolk Counties, St. Francis Hospital in Roslyn, The Mystic Seaport in Connecticut and the Settlement Music School in Philadelphia, among others. The result has been gratifying with awards to The Film Company, the fulfilling of the needs of the many and varied clients, and the professional experience gained by the student filmmakers.

The film on the deaf will be used by educational institutions and organizations for the deaf nation-wide.

#### CINEMATOGRAPHERS HONORED FOR INNOVATIONS IN USE OF MATERIALS

Six distinguished cinematographers were recently honored by Rosco Laboratories for their "outstanding achievement in the innovative use of materials in cinematography".

Four of the ASC cinematographers and the films for which the award were made are (L to R): John Alonzo ("THE CHEAP DETECTIVE"); William Fraker ("EXORCIST II: THE HERETIC"); Richard Kline ("KING KONG"); and Haskell Wexler ("BOUND FOR GLORY"). Two other filmmakers also won awards, but could not accept in person. They are Sol Negrin ("KOJAK") and Steve Larner ("ROOTS").

Rosco Laboratories is the world's largest manufacturer of materials for controlling, reflecting, diffusing and correcting motion picture light. Its line ranges from the familiar 85 materials used for gelling windows to more than a score of products for other filmmaking purposes. The company has won an Academy Award for its technical achievements.

In the presentation ceremony, Stan Miller said that "exposure to television has increased the visual sophistication of the audience. As a result, the cinematographer must strive to constantly improve the quality of his picture. These six individuals stand at the front rank of those who make a special contribution to the artistry of motion pictures. We honor them for their remarkable talent and their achievements. We are pleased that Rosco materials played a role in these achievements."

William Fraker, speaking for the cinematographers, said in his response: "A motion picture is a complex event and everyone—including suppliers like Rosco—makes a contribution to the success of the film. This event recognizes that team effort."

The cinematographers were presented with their plaques at a reception held at Rosco's new West Coast facility at 1135 North Highland Avenue in Hollywood.

# WHEN YOU'RE READY TO MOVE UP TO STEENBECK



## CAMERA MART IS READY FOR YOU.



Steenbeck Model ST-1900

When your editing demands the ultimate in precision, optical quality and ease of operation, Camera Mart has it for you. Steenbeck. The most sought-after name in editing systems. Precision machining and optical excellence combine to give Steenbeck the edge in faster, more versatile editing and gentle film handling. You'll appreciate Steenbeck at 2 a.m., after an all-night session.

And the next day, when your handiwork receives the praise you deserve.

Steenbeck is the ultimate link between your editing ideas and final work print. And Camera Mart is your link to Steenbeck. All models, both 16 and 35mm. With rental, sales and leasing arrangements to suit every requirement. It makes sense that the number one name in editing would choose the number one equipment supplier as their New York distributor. We make a perfect team. Call us today for details.

CAMERA MART LES MEMBER
THE CAMERA MART, INC.

456 West 55th Street, New York, New York 10019 (212) 757-6977 Telex: 1-2078

Rental — Sales — Long Term Leases — Dealers Inquiries Invited

## **INCOME TAX SPECIALIST**

TO

# CINEMATOGRAPHERS & CAMERAMEN

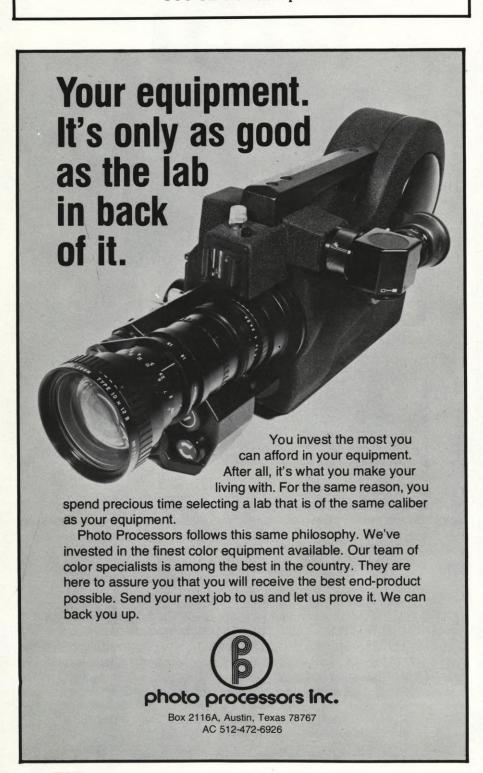
PAUL MILLER
26 COURT STREET

BKLYN, N.Y. 11201
BY MAIL OR APPOINTMENT

N.Y. 212-339-0447

CALIF. 800-852-7631 Op. 43

800-824-5136 Op. 43



## "THE WIZARD OF OZ" Continued from Page 191

Technicolor three-strip, which was a process involving three separate black-and-white films running through the camera simultaneously to be exposed by means of a prism. It was an extremely intricate, very expensive process that produced beautiful color, but required a tremendous amount of light.

We worked under a battery of extremely hot arc lights needed to produce the required level of 1,200 footcandles. It was hotter than Hell and the carbon in the arcs would attract the oxygen in the air, forming carbon dioxide. As a result, we were constantly forced to stop and open all the doors of the sound stage. When you opened the doors of the enormous stages they had at MGM, it took a long time to close them again and get reorganized for shooting. Everything was time-consuming. Everything was ripe for feelings to be hurt—but I don't remember many feelings being hurt.

There were many times, due to the strenuous nature of the work and the extreme conditions of filming, that we were in a state of absolute mental and physical exhaustion. It was a frustrating experience in certain ways, and yet, behind all of that, there was something kind of mysteriously wonderful. Nobody knew what it was, but we rather enjoyed the frustrations and the problems. I know that we joked a lot, because that was the only way that we could survive.

The cast of "THE WIZARD OF OZ" was something right out of a dream world. Where else could you find a Cowardly Lion like Bert Lahr? Nobody else could have played it like he did. And then there was Jack Haley, with his tin voice and great sentimentality. In the song he sang he said he had no heart-and yet he sang like he had a heart. Judy Garland was an absolute dream, the very epitome of what a little girl from Kansas should be like-wide-eyed, a little bit plump and, in a way, beautiful. Working with such people was wonderful. In fact, the whole thing was a great experience-the most satisfying piece of work I've ever done.

"THE WIZARD OF OZ" was made under chaotic conditions. The people in the MGM front office tried at first to save as much money as possible—until they finally realized that that was not the way to make this kind of picture. When it was completed in 1939, I'm not certain they realized what they actually had—and nobody else did either. I'm sure some of the critics didn't. I remember that the critic from the *New Yorker*, a very sophisticated magazine, wrote: "It's a stinker-oo!" Others wrote: "They'll be running

back to the theaters looking for Shirley Temple and Deanna Durbin after this." But that wasn't the case. The public didn't feel the same way that those critics did. And, to their credit, it must be said that there were many critics who thought it was a wonderful piece of work, which it was—extraordinary from every standpoint.

The reason that "THE WIZARD OF OZ" became so popular, and has remained so through the years, is its basic philosophy—that there's no place like home. It makes the positive statement that everybody has a heart, everybody has a brain and everybody has courage, and that if you use these things, you'll reach the pot of gold at the end of the rainbow. That pot of gold is the home, and a home isn't plaster, mortar or brick. It's the people who live there, the ones you love, the ones who love you.

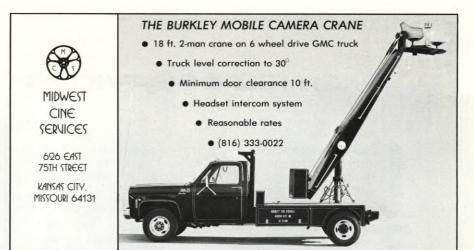
That is why the picture has played on television for the last 20 years in almost every country and why it has been seen by more people than any other film ever made. People all over the world understand the simple philosophy behind the story: There's no place like home.

Those of us who appear in the film get no money for these showings on television. We don't get any residuals. But there's something that we do get that's more important than money. What we get is immortality. This film will live long after we are gone, and those of us who are in it will be remembered for it. That will be our reward.

#### ASC CINEMATOGRAPHERS AVAILABLE FOR SEMINARS, LECTURES, INFORMAL DISCUSSIONS AND QUESTIONS & ANSWERS SESSIONS

The following members of the American Society of Cinematographers have indicated their availability to appear for seminars, lectures, informal discussions and questions and answers pertaining to motion picture and television photography, lighting, special photographic effects and production in general: L. B. "Bud" Abbott, Lloyd Ahern, Taylor Byars, Stanley Cortez, Victor Duncan, Linwood Dunn, Daniel Fapp, George Folsey, Lee Garmes, Richard Glouner, Burnett Guffey, John L. Hermann, Gerald Hirschfeld, Winton Hoch, Michel Hugo, Richard Kelley, Milton Krasner, Vilis Lapenieks, Andrew Laszlo, Jacques Marquette, Richard Moore, Sol Negrin, Frank Phillips, Owen Roizman, Joseph Ruttenberg, Howard Schwartz, Richard Shore, Frank Stanley, Alan Stensvold, Mario Tosi, Ted Voigtlander, Harry Wolf, and Vilmos Zsigmond.

Arrangements as to availability and other details are to be made directly with the individual A.S.C. member. For further information, contact: American Society of Cinematographers, P.O. Box 2230, Hollywood, California 90028. Telephone: (213) 876-5080.



# FAR AHEAD...FLUID HEADS from MILLER

#### THE ORIGINAL FLUID HEADS PREFERRED BY PROFESSIONALS

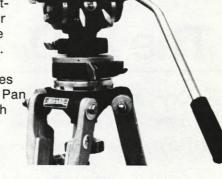
 Miller Fluid Heads, number 105 and 107 provide the versatility and mobility needed by the professional filmmaker. Not only do these Fluid Heads have full fluid action but also have the Slip Pan Unit that facilitates the filming of fast moving objects, racing, sporting and rally events.

 The No. 105 is especially suited for use with the Arriflex 16 (or 35mm with adaptor plate), lightweight Auricon, Eclair, CP16 or similar cameras with magazine and motor incorporated drives. Also TV Cameras.

 Pans 360°, Tilts past 90°. Comes with tension control screws for Pan and Tilt units, and 360° azimuth scale for Pan. Optional right or left handle position.

Recommended maximum load: 30 Lbs.

Weight: 9 Lbs. 4 Oz. Height: 6½ Inches



CAT NO.

105



 The No. 107 incorporates all the features of the No. 105 with the addition of the Positive Heavy Duty Tilt Lock. This added feature permits the use of heavier cameras.

Recommended maximum load: 30-40 Lbs.

 Weight: 9 Lbs. 4 Oz. Height: 6½ Inches



MILLER PROFESSIONAL EQUIPMENT 6500 Santa Monica Blvd. / Hollywood, Ca 90038 Phone: (213) 466-5105

#### Nine ways PALMER FILM SERVICES can work for you: (CONTINUED)

We're Here to Help. Whether your need is for Laboratory, Recording, Editing, Titles, Animation, or Video Transfers, your job will receive careful, personalized attention at Palmer Films.

Advanced Color Developing: Our all-new color plant features the latest equipment and techniques for motion picture processing. We develop ECO, EF, MS, ECN II, Internegative, CRI, 7381 and Ektachrome 7389 and 90 with silver track.

Quality: Palmer Films has been providing top quality picture and sound reproduction for motion pictures since 1936. And if your film needs a little help, we do post flashing, force developing, scene-to-scene color correction, and liquid gate printing.

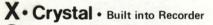
(TO BE CONTINUED)

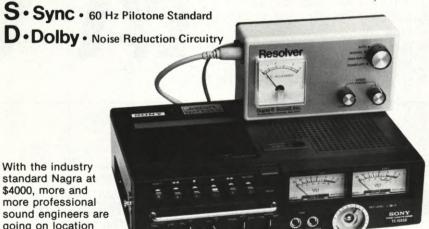
to get the whole story, call:

W. A. PALMER FILMS, INC.

611 HOWARD STREET • SAN FRANCISCO, CA 94105 • PHONE (415) 986-5961 San Francisco's complete 16 mm film service

# The XSD<sub>II</sub> Recorder





going on location with the low-cost XSD Recorder. Improved model II specs: 20-16,000

Hz, S/N 65dB with Dolby, Wow/Flutter .08%.

Write now for full information on the XSD II sync cassette recorder and its companion Resolver.

XSD Recorder — \$650 XSD Resolver — \$300

From the Super 8 Professionals . . . .

Super8 Sound, Inc.

#### "CLOSE ENCOUNTERS" Continued from Page 173

SPIELBERG: When I first began doing TV and I realized that they really wanted me to make a one-hour television show in six days. I knew that everything had to be pretty well planned, because there's no time in television to improvise. Fancy footwork isn't smiled upon in TV. It's a producer's medium; whereas, movies are a director's medium. In television the producer is very strong and very concerned about schedule. When you go over schedule one day in TV, that's the equivalent of going over schedule 10 days on a feature film, unfortunately. So I kind of had to swallow my pride and start paying my dues. I did 11 or 12 television shows over a three-year period. That doesn't seem like many; some directors make 50 shows a year. But for me that was a lot, because I would put so much of myself into each show. I considered each show a mini-feature and I would shoot it as I would shoot a feature. The one thing I refused to conform to was the television formula of closeup, two-shot, over-the-shoulders and master shot. I kept hoping that every time I'd make a TV show, enough people would see it and like my work and give me a feature to do, but it took a number of years before they began knocking on my door.

POSTER: In production there's constant compromise and that always creates a certain amount of pressure. I've seen you in such situations and you always appear completely together.

SPIELBERG: I'm not. Inside I'm asking myself, "Is this the right way to go? Am I painting myself into a corner? If I shoot a closeup of Francois Truffaut, does it mean that I'm going to have to cover him in a sequence I shot yesterday without any closeups?" I mean, I'm always stewing about something. I don't know how I appear outside, because I'm inside, but I just know that even with the best laid plan, I'm always worried that it's not working. I've had too many experiences where my best planned sequence was cut together and was a workable idea, but had no spontaneity, no energy. The planning took over and you could see the girders; you could see the superstructure sticking out of the surface cover. So scenes that I would plan and cut together would sometimes be very disappointing. At other times I would pat myself on the back and say, "Planning is the best way to go." It depends on several things, but I'm always worrying inside about whether I'm making the right move.

POSTER: What kinds of things happened in your earlier films that may have taught you to handle the pressures?

SPIELBERG: Only that the worst they can do is fire you; they can't kill you. I've always taken movies seriously, but I've always sort of had my tongue in my cheek at the same time. When you stand back and get those sudden precious moments of total objectivity and you see 100 people running around, doing their jobs, trying to impress their partner, dropping things, making mistakes, crying over their mistakes, losing their tempers, locking themselves in their dressing rooms, spilling their coffee, losing their money-you just sit back and laugh and tell yourself that the movie business is a wonderful, intoxicating carnival, but that if you take it too seriously, it'll kill you. But if you can always laugh about it when the pressure is really on-if you can stand back and find something funny to laugh at-it's a way of saving your presence of mind, and this is what I do when things get really bad, like on "CLOSE ENCOUNTERS". I'd go up on a scaffold, look down at this 400 x 200-foot concept, and remember how it was designed in papier mache and plaster-12 x 18 inches. I'd laugh. It was a big erec-

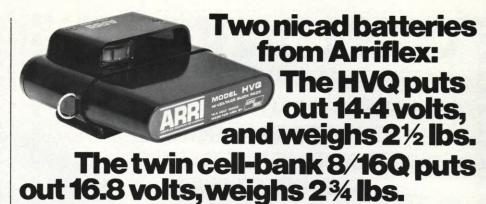
# POSTER: How else do you feel you've progressed in terms of being able to back off from the pressures?

SPIELBERG: I used to lose my temper when I was a kid. I don't lose it as much anymore, although I lost it a few times on "CLOSE ENCOUNTERS". But I used to have a real bad temper when I was 12 or 13 years old and I didn't like myself very much as a result, because I could see how people reacted to it. I don't like to lose control in any situation, emotionally or as a film-maker, and I think that's one of the things that helped me put the brakes on.

POSTER: As a result of what you've learned during your last 15 years of making films, do you ever think about the earlier ones and what you might have done to make them better?

SPIELBERG: I never look back like that. In a way, it's just the reverse. My earlier





Extra voltage means power never drops too low, even near end of battery's run.

Three components: battery pack, holder and charger. Pack contains G.E. Gold Top nickel cadmium cells, rated at 1.5 to 1.8 AH. Batteries reach full charge in 4 to 6 hours – yet you can leave them plugged in with no fear of overcharging. Pack and holder are made of molded Lexan for light weight, high impact resistance and tight fit around cells, which are welded together and connected to printed

circuit board, using silver-plated contacts. Fully charged, HVQ output is 14.4 volts. At end of its rated run, output is still 12 volts. Twin cell-bank 8/16Q can be tapped at 16.8 volts for the 35-2C or at 8.4 volts for the 16S and 16M. Capacity: HVQ will drive 1600 16SR feet, 1200 16BL feet, 1200 35BL feet. 8/16Q will drive 1800 16S feet, 1600 16M feet, 1200 35-2C feet. Holder has built-in voltmeter.

Holder, battery, charger.

Call for free brochure.

ARRIA ARRICA ARR

New York: (212) 932-3403 California: (213) 841-0818

Whatever the speed—Micro-Demand meets the need.

# Filmline's Citation Series Processors with Micro-Demand Drive.



Model DC28-35/16

Now any lab regardless of size, can have the quality and reliability of Micro-Demand, at prices geared to the volume of its operation.

Now the patented Micro-Demand film transport system comes in a full line of Filmline continuous, commercial film processors. Priced from \$8,900. With speeds from 7 FPM to 325

Introduced in 1968 in its "Custom Line" machines for professional commercial labs Micro-Demand remains the most advanced demand drive transport system yet devised for film

processing.
Micro-Demand dependability is outstanding—it will run 24 hours a day, seven days a week, at top speed, with virtually no maintenance.

The inherent design of the Micro-Demand system allows the use of conventional film rollers and bearings, eliminating the need for fragile plastic spring bushings, eccentric wobble rollers or other mysterious contrivances. "Push-Button" operation and reliability allows the operator to perform other functions while the machine is running.

All Filmline processors use stainless steel construction throughout except where other alloys or formulations are recommended or proven superior.

Every Filmline machine is designed for "Zero Down Time" and backed by a superb performance record compiled in over 25 years of continuous service to the industry. Twenty-five years in the forefront of processing machine design and innovation

through service to the industry. I wenty-five years in the forefront of processing machine design and innovation.

Partial Listing of Filmline Installations: Deluxe-General, Technicolor, Inc., Capital Film Labs., Byron Motion Pictures, TVC Labs., Movielab, Radiant Laboratories, Gufanti Labs., Precision Film Labs., Bellevue-Pathe, ABC, CBS, NBC Network TV, NASA, General Motors, RCA, IBM, AEC... and thousands of others.



"When you buy quality, Filmline costs less" Filmline Corporation Milford, Connecticut 06460 Area Code 203 - 878-2433

# JOHN BARY GROUP

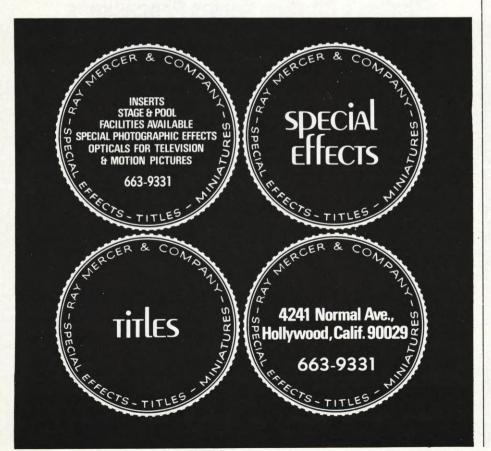
SALES — RENTAL — SERVICE CAMERAS — SOUND LIGHTING — EDITING — EVERYTHING —

We are your one-stop equipment house in Australia and Southeast Asia with the most comprehensive range of 16mm and 35mm motion picture/television production equipment available for SALE or RENTAL



105 Reserve Road Artarmon, N.S.W. 2064 Sydney, Australia. Telephone: 439-6955 TELEX: 24482

**AUSTRALIA** 



films taught me how to prepare myself for my later films, and I've never really been able to look back and ask myself how I could have made "THE LAST GUN" (my first 8mm three-minute Western) better with what I know now. The whole creative process is a growing process, and to look back and sort of speculate on how things could have been is a little scary.

POSTER: But aren't there elements of the film-making process that you've learned to pay more attention to, as a result of what went before?

SPIELBERG: Yes—mainly acting, the actors. I've learned that one explosively dramatic scene between two people with the right chemistry is so much more exciting than a thousand people on the steps in "POTEMKIN". It dawned on me that one good performance by an actor like Richard Dreyfuss is worth a couple of big action sequences—Custer's Last Stand, car chases, King Kong, whatever.

POSTER: After "JAWS" and "CLOSE ENCOUNTERS" you have the freedom to make almost any kind of movie you want to make. How do you approach finding your next project?

SPIELBERG: I don't know. I don't really worry about it that much. I'm usually lucky in having things come to me when I'm not looking. I become interested in a project, not because of the pressure of having to work again, but because I read something or I had an idea that was exciting and I put it down on paper and eventually planned to make it. There's a comedy I'm going to make next which came to me at the beginning of "CLOSE ENCOUNTERS"-just at the time when I shouldn't have been looking ahead. I found something that I put in the back of my mind and I said to myself, "Maybe I'll make this film someday." And, as it turns out, that will be my next picture. What is difficult for me is when the offers start coming in and I have to read the books and I have to read the scripts. But on the other hand, if I hadn't read the galleys of "JAWS" before it was published as a book, I never would have become involved. So I'm a little nervous about not reading, not searching constantly for new ideas

POSTER: Can you tell me a little more about how you did become involved in "JAWS"?

SPIELBERG: It was somewhat accidental. I was cutting "SUGARLAND

EXPRESS" and Zanuck and Brown, who were the producers of that picture, were offering me everything under the sun that they had and I wasn't really liking very much of what they had to offer at the time. But I had a meeting with them on the first or second cut of "SUGAR-LAND" and I noticed in the outer office an unpublished book manuscript called "JAWS". I don't know what seized me. but I thought the title was so fascinating-I thought it was about a credit dentist-that I picked up the book (actually swiped the damned thing), took it home, read it over the weekend, and knew that that was what I wanted to do next. So I went to them on Monday and said, "We've been looking for a film to do together and I've found it in your office." They said, "Well, we'd love to have you on this, but the agent who sold it to us also sold us a director. He's part of the package deal." And I said, "Well, if anything happens in the future and he falls out of the project, give me a call." And that's exactly what happened. About two weeks later they called up and said, "You've got the job, if you still want it."

POSTER: You told me that you'd like to do a musical at some point. What other kinds of things are you interested in doing?

SPIELBERG: Oh, your garden variety love story, a Western, a musical, a war film, an erotic fantasy, a comedy . . . a little bit of everything.

#### POSTER: So you'd really kind of like to play the field?

SPIELBERG: Yes ... whatever strikes my fancy that year. The one thing I don't want to do is have a 10-year game plan, where I have my next five projects already lined up-one through five. I think that'd be an awful way to go through life-knowing what your next five films are going to be over the next 10 years. It's not only boring, but you also change. Nobody stays the same for more than a couple of years. Some people change every week. What I liked in 1971 I probably wouldn't have made now. I probably wouldn't make "DUEL" now. Looking back, I probably wouldn't make "JAWS" three years from now. So it's important not to plan too far ahead, because each project is a reflection of what you were that year.

POSTER: One of the main objectives of this interview is to encourage people just starting out in film to take advantage of the technology available to them today. What advice can you CIRO splicers and tapes 35mm, 16mm and 8mm

> Single and double perforation, positive and negative pitch, anamorphic formats. New spring-loaded bridge holds tape taut, keeps end out ready for next splice.

Perfect registration fast. The CIRO makes its own perforations in the splicing tape, and trims the edges automatically.

ay the cut film along the recessed splicing block. (Its position pins hold the ends in precise registration.) Pull the tape across the open splice. Lower the chopper. Done.

Effortless accuracy
A perfect splice. Tape perfs
exactly where they should be. Film
and tape dead straight. No protruding edges. No effort.

Frame-line tape edge

In 16mm, both tape edges are on the frame line. Workprints look cleaner. On TV news footage, the splice is effectively invisible at 24 frames per second.

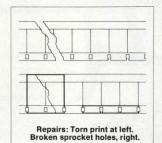
No frame loss

If you change the cut, there's no frame lost, of course. And since you made the original cut on the CIRO's block, ends match exactly.

Instant repairs

Broken sprocket-holes can be rebuilt with no tape in the image

area! (See illustration.) With the CIRO, film libraries can repair torn release prints without a jump cut.



Easily through the gate A cement splice almost doubles the film's thickness at that point. CIRO tape on *both* sides of the film increases it from about 72/1000 inch to 75/1000 inch! (Horizontal editing machines let you use tape on one side only.) CIRO splices run through projectors smoothly.

Looks better on screen Because every CIRO splice is Because every Circle spice is perfectly registered, the image doesn't weave as it goes through the gate. With CIRO tape, the clean, straight sides of the tape run across the film — not a torn-off, serrated section. So dirt doesn't stick.

Tape two-thirds cheaper

Because it's not perforated, high-quality CIRO tape costs about a third the price of pre-perforated tape. Not a big item – but it adds up. After about thirty rolls, your tape savings have paid for the splicer. (CIRO tape, incidentally, is guaranteed not to telescope.)

One year guarantee Overall, the CIRO is built to last. Stainless steel precision. Nevertheless, every model is guaranteed for a year, parts and labor.

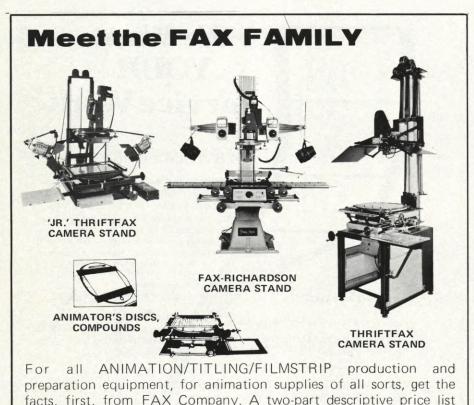
Ciro Equipment Corp 6820 Romaine Street Hollywood, Calif. 90038 Phone: (213) 466-3591



DALLAS, TEXAS 75220

(Area Code 214) 357-3045 or 357-2725





covering "The Mechanics of Animation" and "The Art of Anima-

FAX COMPANY

Animation Equipment Since 1928

374 S. Fair Oaks Ave., Pasadena, Calif. 91105 — 213/681-3084

tion" is yours free, on request. Tell us of special needs.

#### give those people?

SPIELBERG: Get one of the Super-8 sound cameras that are on the market. Get it for Christmas. The equipment available today is so sophisticatedwhich is both an advantage and a disadvantage. For example, if I'd had in 1961 what teenagers and even preteenagers have available today. I wouldn't have had to spend so much time on each project-but I wouldn't have learned as much. The problem with the new-fangled equipment today is that it obviates the necessity for post-dubbing, working with tape recorders, balancing and mixing music to sound. Everything is so "instant" that it goes right onto the film. Back then it was fun. because I learned about recording sound, I learned about music, I made my own sound effects. But today, making sound movies is as easy as getting out of bed in the morning-if that happens to be what you think is easy.

# POSTER: Does that mean that you feel that the very sophistication of present-day Super-8 equipment is a limiting factor?

SPIELBERG: Not if you want to make quick and painless home movies. But the people who aspire to becoming professional film-makers will learn what they really need to learn only when they get into working with 16mm and 35mm. From Super-8 they'll learn nothing about laboratory work, color correcting, lap dissolves, opticals. They'll learn nothing about mixing sound and very, very little about lighting, because the new film is so fast that all you have to do is turn your lamp on and you have a very nice Gordon Willis cross-light. If your subject sits near a window, you've got natural light coming in and the camera adjusts itself. So you don't become skilled at lighting. at changing your aperture, at underexposing, over-exposing, flashing, shooting through filters. It's all a little too pat with the equipment they have today. But on the other hand, the results are instantaneous. I had to wait a week and a half for dailies, because that's how long it took to send the thing out and get it back. Today you see your film with sound on it the next day, 24 hours laterjust like the real pros-and when you sit back and watch those dailies, you're going to know right away whether you want to make movies for the rest of your

POSTER: What advice do you have for those people who decide they want to make movies for the rest of their lives?

SPIELBERG: For people who are interested in directing movies, I'd say: start as young as you possibly can and make your own films, rather than reading about other people who have made their own films. There is no substitute for getting out there and shooting, cutting and then showing-especially showing, especially listening to the audience and seeing how tuned in you are to their needs. At the same time, what young people-even those who are dedicated to a career in film-making-are finding out is how hard it is to get more established types to look at their work. But that's just part of the footwork-the tired feet, the suffering, the disappointments. I get a lot of letters from young people who say, "I've finished four films. Who can I show them to? Nobody seems very responsive." And they're not. They're not responsive; they're not receptive. I had a hell of a time showing any of my films. A lot of it is luck, and a lot of it is wanting it so much that you're going to take the hinges off the door to get it open. There are people out there who are sympathetic to young film-makers and there are those who are not. But that's where the hard work comes in . . . selling yourself. Selling yourself is the hardest thing in the world to do-even harder than making movies, when you're first starting out.



Arri 16-S with V-S motor, Angenieux 12-120 zoom lens price \$ 2,695.00



Nagra IV with two pre amps, XTAL crystal sync price \$2,475.00

Sawver Camera Company 6820 Santa Monica Boulevard Hollywood, California 90038 (213) 466-6111

#### SHOOTING IN THE NORTHERN CALIFORNIA AREA CALL CINEMA SERVICES CO.

of San Francisco for all your

Lighting equipment, grip equipment, brutes, HMI lights, generators, grip trucks

WRITE OR CALL FOR PRICE LIST:

#### CINEMA SERVICES CO.

3866 Bayshore Blvd., Brisbane, CA 94005 Phone (415) 468-5220

Distributors of Mole-Richardson Products



Approved for Veterans

A study of the Motion Picture and Television Arts and Sciences within a degree program, taught by a distinguished faculty.

Now Registering. Write for a descriptive brochure.

#### COLUMBIA COLLEGE

925 No. La Brea Ave. Hollywood, Calif. 90038 851-0550



### HOW DO YOU IMPROVE THE ACCURACY AND RELIABILITY OF A PERFORATED TAPE, FILM OR CHART DRIVE?



#### USE LAVEZZI HIGH PRECISION SPROCKETS, NATURALLY

Precision is more than just a word at La Vezzi. It has been the underlying concept for nearly 75 years of manufacturing sprockets, Geneva starwheels and drivers, and other critical machine parts.

La Vezzi's record for achievement is testified by practically every motion picture projector used in the cinema today . . . in tape control systems, in medical analytical equipment, geophysical and astronautical recording systems, as well as data processing and business equipment.

The reason! La Vezzi has developed the technology to produce components with tight tolerances, and instituted quality control standards to verify the integrity of their parts.

Look to La Vezzi for an accurate way to drive your ideas.
Our catalog tells all.



La Vezzi
machine works, inc.

900 N. Larch Ave., Elmhurst, III. 60126 (312) 832-8990

## PHOTOGRAPHING "F.I.S.T." Continued from Page 185

my own information, and my instincts start working in the same direction.

Photographing a feature is like a 24-hour job. You are totally tuned in—dramatically, physically and emotionally—to the screenplay which you have the responsibility of translating into an actual rectangular frame. When the lights go down in the theater and the image comes up on the screen, then is when everybody's combined effort suddenly comes alive.

There are so many elements that have to come together just right in order to make a good film, and the director is the captain of the team. He's the major artist on the film. Many times actors fight a director. They go against him and the poor guy has to fight for his own concept—so he doesn't need an enemy; he needs an ally. The cinematographer can and should be his main ally. That's the kind of working relationship that should prevail, in my opinion.

I really liked working with Norman Jewison on "F.I.S.T." very much. I felt from the first moment on that he trusted me, and I trusted him, too. Trust is a basically very, very important factor in a working relationship, and especially in film work. In this field we all tend to be very sensitive, very emotional people who respond to such things in perhaps a more exaggerated way than other people would—probably because we are dealing with drama.

My involvement with "F.I.S.T." came about as a kind of accident of Fate. After I finished "NEW YORK, NEW YORK", I was supposed to work with Warren Beatty, but because of many unforeseen problems, he had to keep postponing the project. It was then that Norman Jewison came along out of the cold from Europe. He was looking for a cinematographer and I turned out to be the lucky bastard. I felt very honored and pleased that he selected me to photograph his picture, because I knew it would be a wonderful project. When I read the first draft of the script I realized its potential and told him, "This is a powerhouse!" I knew it would be an incredibly powerful film.

During the filming, Norman tried to create a focus for everybody—not just the actors, but everyone on the crew, as well. He wanted to see everybody involved and not regard it as just a job for which you get a paycheck every Thursday. He wanted the props and wardrobe people, the grips, the electricians, the scenery painters, everybody to generate a kind of excitement. You really pay attention to him when he's speaking, and not just because he's got a voice that can

# Samy's

Bolex EBM w/100 POE Vario Switar w/ charger, grip	
Bolex 100' Double Super-8 camera w/3	NOW 92 197.U
Switar lenses	
Beaulieu R16 Auto w/12.5 & 75 Ang., (	Grin
1000mm battery, charger	Like New \$1400 or
Beaulieu 5008MS with Ang. 6-80	LING NOW \$ 1490.00
Like New	\$1107 O
Beaulieu 3008MS with 8-50 zoom	Heed \$ 007.00
Beaulieu 5008s w/Ang. 6-80	
Beaulieu 4008ZM, 8-64	
Beaulieu R16B body	
Beaulieu R16 auto with 17-68 Ang., bat	
grip and charger	Close \$ 180.0
Bolex EBM w/100 POE Vario Switar w/	/hat
charger, grip	Used \$1497.0
Bolex MST, motor with battery pack	
ANCENIEUX PRIME LENGER Hand MILE	
ANGENIEUX PRIME LENSES, Used, Mir	
10mm f1.8	
25mm f.95	
50mm f1.9	
75mm 12.5	\$ 207.00
Miller Pro head with wood legs	Mint \$ 447.00
Arrivox-Tandberg tape recorder	Used \$ 837.00
Sennheiser shotgun mic 815 w/shock m	
Demo	
Siemens 16mm 1p/mag	
Bauer P6, 16mm	
Spectra Combi II	
Pentax Digital Spot meter	New \$ 289.00
B&H 16mm Specialist projector	
Elmo ST 600 projector	
Elmo ST 1200 HD sound projector	
B&H 202 opt/mag projector	Used \$ 487.00

#### Samy's Camera

8451 Beverly Blvd. Los Angeles, CA 90048 Telephone: (213) 653-1090

# When it comes to lighting... come to the source. Charles Ross The Light Source

Largest Suppliers in the East of Lighting, Grip, Equipment, Props, Generators

Sole Distributors of Mole-Richardson Products in New York/New Jersey Area.



333 West 52nd St., N.Y., N.Y. 10019 212/246-5470



The book that takes the mystery out of movie making

selected for use in filming the 21st Olympiad.

alan **GOPUON ENTERPRISES INC.** 1430 Cahuenga Bivd., Hollywood, CA 90028 Telephone: (213) 466-3561 • (213) 985-5500 TWX: 910-221-4826 • Cable: GoRDENT

## LOW BUDGET FEATURES

A "HOW-TO" HANDBOOK FOR INDEPENDENT PRODUCERS

Packed with up-to-the-minute information on:

- Film Financing Organization Script
  Breakdown Production Boards Shooting
  Schedules Cost Estimating Union Contracts
- Talent Contracts Equipment
- · Crew Requirements

and hundreds of other topics PLUS -

Source Directory Craft Dictionary

27 Page Sample Budget
(Completely Worked Out)

\$20.00 (Plus Tax in Calif.)

SEND CHECK WITH ORDER TO

WILLIAM O. BROWN
P.O. BOX 2641A · HOLLYWOOD, CA 90028

cut through 300 extras who are yelling and screaming and babbling. When you hear his voice, *everybody* hears it.

We had to work together closely to choreograph the battle scenes for the strike sequences. He had a very definite idea of where he was going to take the whole story dramatically, step by step, and that's when I had to become closely involved with him and help him and give him suggestions and ideas. I had to be able to understand his concept and not attack it. It was like building a structure brick by brick-and if he needed another brick, I had to try to hand it to him. So, it was a very intense relationship, but we also had a lot of fun and excitement. Norman shakes you up emotionally and he's just really great to get involved with on a film. For me that's half the battlegetting involved that closely with the director. It makes my job so easy, because it becomes almost obvious what I have to do.

I'm happy with the lighting style adopted for this picture because I feel that it serves the subject well. A cinematographer has an incredible amount of control over the motion picture frame, because he starts with black and builds from there. It's like the creation of the Universe. You are in blackness and then you build your structures, especially with the lighting. The lighting is the most important element, because it gives you the textures, the compositions, the moods, the color, the tone—everything that really projects to the audience.

The cinematographer has a great deal of responsibility on a feature filmespecially one as complex as "F.I.S.T.". You are dealing with all kinds of logistical problems having to do with cast, crew, extras, cameras, lights, the sun, rain, overcast, lighting-and you have to keep your head very straight in order not to lose direction. That's why I object to cinematographers being classified as "technicians"-even when it comes to consideration for the Academy Awards. It's true that we work with very complex technical hardware in order to achieve an artistic result, but the hardware is simply our tools. You wouldn't call a writer a "typist" simply because he works with a typewriter.

Cinematography is definitely an art form and, therefore, I feel that we should be considered not merely technicians, but artists.

#### MOVING?

When changing your address, please notify us at least four weeks in advance. BE SURE to give your FORMER address as well as your NEW ADDRESS and ZIP CODE.

AMERICAN CINEMATOGRAPHER

## The ARRI Bridge Plate is part of the Arriflex system.



It works with 35BL,16SR and 16S/B cameras.





# And it works with these important new accessories:

Arri servo zoom-drive, followfocus unit, 16SR studio matte box, all 35BL lens housings, matte boxes and magazines. Plus various other Arriflex matte boxes and filter holders, and lenses up to 1000 mm. All future Arri accessory equipment will be compatible.

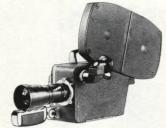


35BL on Bridge Plate. Rod lengths vary from 6 to 15 ins.



P.O. BOX 1102C, WOODSIDE, NEW YORK 11377; (212) 932-3403; 1011 CHESTNUT, BURBANK, CALIF. 91506; (213) 841-0818





# all under one umbrella MOTION PICTURE EQUIPMENT SPECIALISTS

the BRENNER CINE-SOUND organization covers every aspect of Cinematography equipment. Under our umbrella we have a unique team of personnel and services, backed by many years of expertise related to Sales, Service, Rentals and Repairs.

■ Whether your requirements are: Cameras, Lenses, Motors, Magazines, Tripods, Power Supplies, Lighting, Editors, Meters, Projectors, Tape Recorders or Screens BRENNER CINE-SOUND has it in stock with product names such as:

Angenieux
Arriflex
Arrivox
Beaulieu
Beyer
Bolex
Canon
Cinema Products

Colortran

Eclair Electro-Voice Guillotine Magnasynch Maier-Hancock Miller Minerva Moviola Neumann O'Connor Oxberry Permacel Revox Sennheiser Shure Spectra Sonorex Zeiss

For more information on Motion Picture Equipment, Sales, Service & Rentals, call or write

Nagra

5215 Wisconsin Ave., N.W., Washington, D.C. 20015 (202) 244-3800

# BRENNER

Div. of Ritz Camera Centers

Please mail  ☐ Service	me addition    Sales	al information:  Rentals
Name		
Address	100	
City		
State		Zip

#### FESTIVAL RETROSPECT Continued from Page 193

efforts in the past year with the following 24 films:

"Bang" (Sweden), "The Ascent" (USSR), "A Summer Tale" (Romania), "Time of Maturity" (Germany, F.R.), "The Fifth Seal" (Hungary), "Bound for Glory" (USA), "Chac" (Panama), "L'Homme qui Aimait les Femmes" (France), "Black Litter" (Spain), "Dead End" (Iran), "Why Shoot the Teacher?" (Canada), "Annie Hall" (USA), "Diary of a Lover" (Germany, F.R.), "Un Borghese Piccolo Piccolo" (Italy), "J.A. Martin, Photographer" (Canada), "Rocky" (USA), "The Life of Chikuzan" (Japan), "Le Diable Probablement" (France), "Bobby Deerfield" (USA), "Padre Padrone" (Italy), "Una Giornata Particolare" (Italy), "Three Women" (USA), "Omar Gatlato" (Algeria), "Madame Bovary" (Poland).

#### **CINEMA HAS EYES AND EARS**

Pointing out the significance and value of documentary or semi-documentary films, this section comprised 13 feature and 3 short films as follows:

"Beethoven—Days of a Life" (Germany, F.R.), "Hollywood on Trial" (USA), "How Starry Was My Night" (Iran), "Pumping Iron" (USA), "The Bible" (France), "Voyage of the Hokule'a" (USA), "The Amazing Howard Hughes" (USA), "A Sunday in Hell" (Denmark), "Moi, Tintin" (Belgium), "Lebanon . . . Why?" (Lebanon), "The Newest Weapons of the World" (Japan), "Kung-Fu Wu-Su" (France), "The Friendly Monsters of the Sea" (Italy), "Some of the Palestinians" (United Nations and Jordan), "Bertolucci Shoots '1900'" (Italy), "California Reich" (USA).

#### RETROSPECTIVES

This year there were three separate retrospective sections: "Hommage to King Vidor", "A Tribute to American Musicals" and "Iranian Films and International Festivals".

Paying tribute to one of the great masters of the cinema, 12 films of King Vidor were presented as follows: "The Crowd", "Show People", "Hallelujah", "Billy the Kid", "Our Daily Bread", "Stella Dallas", "Northwest Passage", "Duel in the Sun", "The Fountainhead", "Ruby Gentry", "Man Without a Star", "Solomon and Sheba".

"A Tribute to American Musicals", which covers a glorious era in the history of cinema, comprised of the following 24 films:

"Jazz Singer", "Gold Diggers of Broadway", "Anything Goes", "Show Boat", "Broadway Melody", "Blue

# REELS. CANS. CASES.





#### STEEL-PLASTIC FIBER

Specify GOLDBERG for all your REEL needs!

We make it!



P.O. Box 5345, T.A. — Denver, Colo. 80217

## **CINEMONTA Film Editing** Tables.

We sell, lease and rent them.



freedom of expression. The superior Film Editing Console that does ALL the work for which it was intended.

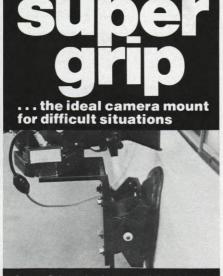
Now, it can be creatively yours. Available in 2, 4, 6 and 8 plate models. 16mm and 35mm. Factory serviced in U.S.A.

CINEMONTA by Oldelft of the Netherlands. Another master in the

#### KLM Associates, Inc.

Distributors of Quality Film Editing Equipment & Supplies

11810 Charen Lane, Potomac, MD 20854 (301) 299-7259 Telex 64249 (213) 931-6151 West Coast



Super Grip's single, powerful "gripper" makes it a quick, strong and efficient means of mounting cameras and lights in an unlimited number of difficult situations. It will mount on curved, irregular or flat surfaces in a horizontal, vertical or in-between position and it may be tilted through a 360° circle by turning the gripping pad on the surface.

PRICE: \$375.00

Super Grip complete with carrying case, lera bracket, mounting bolts, wrench and his)

#### alan gordon enterprises inc.

Skies", "Berkley Broadway", "Easter Parade", "An American in Paris", "The Glass Slipper", "There's No Business Like Show Business", "Pal Joey", "Let's Make Love", "West Side Story", "Sound of Music", "Thoroughly Modern Milly", "Funny Girl", "Sweet Charity", "Hello Dolly", "Paint Your Wagon", "Fiddler on the Roof", "Little Prince", "That's Entertainment", "A Star is Born".

"Iranian Films and International Festivals" comprised 13 feature and 11 short films as follows: "The Cow", "Downpour", "Dash Akol", "A Simple Event", "The Mongols", "The Passenger", "Still Life", "Release", "Shazdeh Ehtejab", "Tangsir", "Stranger and the Fog", "In der Fremde", "Stone Garden", "The Dawn of Capricorn", "Burning Poppies", "The Sacred Pit", "The Mad Mad Mad World", "The Bamboo Fence", "Flower Shower", "The Voyage", "The Boy, the Bird and the Musical Instrument", "The Night It Rained", "Wooden Pistols", "Waiting".

The festival also had five special screenings at Rudaki Hall:

"La Fiance du Pirate" (Nelly Kaplan, France); "The Long Weekend" (Juan Antonio Bardem, Spain); "Evening Lands" (Denmark); "Seclusion Near a Forest" (Jiri Menzel, Czechoslovakia); "The Alaska Story" (Hiromichi Horikawa, Japan).

#### WHAT'S NEW Continued from Page 116

3250°K or 300 Watt 3350°K dichroic Quartz that operate on line voltage. Housing is all aluminum with a total weight of just 14 oz. The fixture has a unique pop-off cover for easy lamp replacement.

Effective light range is up to 50 ft. An accessory holder, 3-wire grounded cable and male connector are included in the price of only \$27.50 (without lamp).

The new miniature floodlight is ideal for remote or studio application and is particularly well suited to tight area lighting needs; is sold in 3 unit, 4 unit, 6 unit, 8 unit or 12 unit multiple packs. Foam-lined carrying case is available to house fixtures and lamps.

The new PLS 40 page color catalog, illustrating the entire line, is available free upon request. Phone 914-778-3515 or write to Packaged Lighting Systems, Inc., Grant St., Box 285, Walden, New York 12586.

#### MOVING?

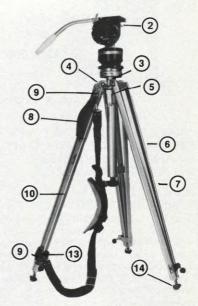
When changing your address, please notify us at least four weeks in advance. BE SURE to give your FORMER address as well as your NEW ADDRESS and ZIP CODE

AMERICAN CINEMATOGRAPHER



The fastest lightweight news/documentary tripod in the world

# IPER



#### 21 SUPER FEATURES

- Miller F Head reliability & economy Ronford F-2 fluid head in adjustable ball mount w/variable fluid control Removable wedges for low angles Adjustable for leg friction Hanger hooks for meter, ditty bag, battery belts, etc.

  Reversible rising column Ball level tightening handle Balanced carry handle
  'D' ring for over shoulder strap Adjustable telescopic legs Column and legs extend to 6' 7½" Minimum height of 66 cm (2' 2") Velcro transport lie-ups

- Velcro transport tie-ups Rubber foot or steel spike Swiss-made precision

- Aluminum construction
- Extreme light weight Great steadiness
- Modular construction
- 20. Weatherproof 21. Over shoulder (leather) carry strap

Super Stix (legs only) ......\$350 Super Stix with Miller F head ......\$695 Super Stix with Ronford F2 ......\$995
IDI will do Super Stix modifications

if you own one of these standard Swiss tripods ......\$ 35

Major credit cards accepted

#### **UPDATE MODIFICATION INCLUDES**

\*Over the shoulder leather carry strap installed \*Balanced carry handle installed \*Hanger hooks installed \*Extra D-ring installed \*Velcro tie-ups installed

CALL TOLL FREE 800-327-5181

#### IMAGE DEVICES

INCORPORATED

1825 N.E. 149 Street Miami, Florida USA 33181 Telex 51-9348 TWX 810 845-4242 PHONE 305/945-1111

1651 Phoenix Blvd. Atlanta, Georgia USA 30349 TWX 810 766-1060 PHONE 404/996-0000

# FILM and VIDEO FESTIVALS

YOU CAN WIN!



over \$750,000 in

Cash & Prizes

# ANNOUNCING THE ALL NEW INTERNATIONAL DIRECTORY for AMATEURS, STUDENTS, and PROFESSIONALS!

At last after 3 years in the making . . .
—FIRST TIME UNDER ONE COVER—
Complete, accurate, up-to-date information on everything you need to know to enter 1500 SEPARATE EVENTS in film, video, audio, photography, TV-radio broadcasting, fiction/nonfiction writing, poetry, script & playwriting, advertising, newspaper-magazine journalism . . . including:

- · Contests, festivals, competitions.
- · Grants, money & equipment loans.
- · Prizes, awards, honors, project funds.
- · Scholarships, fellowships, residencies.
- Apprentice, training, intern programs.
- Salons, exhibitions & tradefairs . . .

and -

## HOW, WHEN, and WHERE YOU CAN WIN!!!

CROSS INDEXED — EASY TO USE 5% x 8%" - 500 pages - softbound (LC No. 77-089041) (ISBN 0-930828-00-3)

ORDER TODAY & SAVE MONEY AT THIS SPECIAL DISCOUNT PRE-PUBLICATION PRICE . . .

only \$12.95 (regular \$15.95)

with 14-day full-money-back guarantee on books returned in salable condition.

RUSH check or money order, and \$1.00 postage & handling to:

FESTIVAL PUBLICATIONS Dept. AC-1, P.O. Box 10180 Glendale, Calif. 91209 U.S.A.

Order Today! (Limited time offer available only thru this advertisement)

To: FESTIVAL PUBLICATIONS Dept. AC-1, P.O. Box 10180 Glendale, Calif. 91209 U.S.A.

	copies of CONTESTS, FE \$12.95 each, plus \$1.00 postage	
I enclose ch	eck or money order for	tota
Name (print	)	
realise (print		

California residents add 6% sales tax.

#### TEHRAN FILM FESTIVAL Continued from Page 189

a development which I personally find heartening. Among the films which fall into this category are: "PINK DREAMS" (Czechoslovakia), "THE BOYS" (Denmark), "NENE" (Italy) and "THE SUMMER I WAS FIFTEEN" (Norway).

All four films are exceptionally well made, but "NENE" stands out as the one that goes far beyond mere character study to present a fully realized dramatic interplay of explosive elements. Beautifully photographed by Academy Award-winning ("ROMEO AND JULIET") cinematographer Pasqualino De Santis, the action of the film takes place after the World War II and concerns what appears to be a "typical" family with two small children.

Arriving to stay with them is a young girl relative, Nene, who is virginal, but full of curiosity and her catalytic presence dispels the "typical" atmosphere and unleashes a flock of stored up Freudian inhibitions in every direction.

The title role is played with a kind of luminous purity by Leonara Fani, whose madonna-like facade just barely conceals a maelstrom of burgeoning sex drives. But the picture is "stolen" by a captivating seven-year-old boy, Sven Valsecchi, who gives a spellbinding performance as the sounding board for all of the violent adolescent and adult emotions that ricochet around him.

During the course of my film viewing, I am very much impressed with the general level of excellence of the films presented in and out of competition—the best selection I have seen in the five years that I have been attending the Tehran Festival. Space limitations, unfortunately, make it impossible for me to comment at length on all of the features I feel are worthy of such recognition, but I should like to mention a few of those which impressed me the most:

"THE SUN OF THE HYENAS" (Holland—Tunis)—A beautifully made dramatic feature that has the feel of an actual documentary, this film depicts the metamorphosis of a North African fishing village into a tourist center by German financiers, aided by the connivance of Haj Ibrahim, a wealthy landowner who is willing to sell out his countrymen for financial gain. The entire fabric of village life is torn to shreds and the character of its people is undermined in the name of "Progress". Extremely well photographed by Theo van De Sande.

"SUTEH DELAN" (Iran)—Among the very best (and fastest-moving) Iranian films ever made, this highly entertaining

# American Inema togra pher REPRINT

-June, 1968 FILMING "2001— A SPACE ODYSSEY"

OF THE ART

June, 1970 — SUPER-16

\$5.00

ALL IN ONE PLACE

(Dealer Discounts—Inquire)

P.O. Box 2230, Holl	
Please send me FOUR-IN-ONE re postpaid.	
NAME	
ADDRESS	
CITY	
STATE	ZIP
Sales Tax. (30¢ p	ts please remit 6% per copy). Foreign by International

Money Order or U.S. Funds.





feature centers about Majid, who is notquite-right in the head, but a delightful character all the same. He falls in love with a prostitute who, under all the paint and assumed sophistication, turns out to be a basically childlike personality like himself. Together they laugh and play and love until his discovery of her past triggers the darker side of his mental illness and destroys him. The film is at once very funny and profoundly touching, with a universal appeal that should make it do well in the international market.

"THE INUGAMIS" (Japan)—Director Kon Ichikawa, with tongue in both cheeks, has fashioned a film of family intrigue which, in its very excesses, is enough to hold an audience spellbound. Never has so much intrigue spilled over onto the frames of a single motion picture. A whodunit, carried to grand guignol extremes, it depicts a grisly series of murders, as family members vie for the fortune of a deceased multi-millionaire pharmaceutical king. Only a director of Ichikawa's rare skill could carry off such a load of corn with such style and entertaining elegance.

'THE AMERICAN DREAM'' (Sweden)-A fascinating study of Hjert and Tector, two rollicking rogues, who meet in prison and decide to try to get to America and start a new life when they are released. Having forfeited their civil rights, they are forced to turn once more to crime in order to get the money for their journey. In the course of a bungled robbery, they kill a coachman and a passenger. The light-hearted tenor of the story changes abruptly to that of stark drama, as they are hunted down and ultimately beheaded. A notable achievement in every phase of production.

"MANLY TIMES" (Bulgaria)—An outstanding example of how a handful of the simplest elements can be made into an extremely powerful and entertaining film. Photographed almost entirely in the open countryside and with only a few basic characters involved, the film is based on the ancient Bulgarian custom of hiring "professionals" to kidnap a bride coveted by a local villager. In the course of the kidnap, the chief abductor falls in love with his quarry—and vice versa, but with a bittersweet result. Spectacular performances by Grigor Vachkov and Mariana Dimitrova in the lead roles.

"THE FIFTH SEAL" (Hungary)—A film with the power of a pile-driver. Laid in war-time Hungary, with the fascist regime harshly administered by Arrow Cross shock troops, it presents the moral dilemma faced by a group of friends who



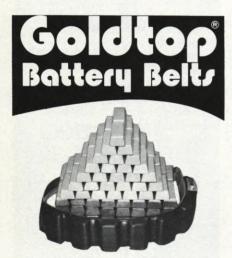


Write for Details

**MOS STAGE** 

CUSTOM CABLE SYSTEM

181 SECOND STREET SAN FRANCISCO, CALIF. 94105 (415) 495-3852



- · Completely rechargeable in three to four
- All Goldtops have built-in chargers Batteries can be recharged over 50% more times than other fast-charge batteries

Goldtops operate in temperature ranges from  $-40^{\circ}\text{F}$  to  $+150^{\circ}\text{F}$ .

- Belts incorporate special braided cable for long flex life. · Belts have five-year warranty on housing
- and unprecedented one-year warranty on all electronics and cells.

  Goldtop belts include all the skilled

craftsmanship found in Chiles Battery Belts.

There's a Goldtop battery belt for use with any professional 16mm and 35mm motion picture camera and all ENG cameras. Write for prices and additional information.

#### alan gordon enterprises inc

1430 N. Cahuenga Blvd., Hollywood, Calif. 90028 Telephone: (213) 466-3561 • (213) 985-5500 TWX: 910-321-4526 • Cable: GORDENT

are carried off by Arrow Cross troopers for no reason at all, except the fanatical obsession of their leader to turn them into obedient, unquestioning instruments of his power. He demands (as the price of their freedom) that they slap the face of a man who has been brutally tortured. The friends refuse and choose to die. Only the mild-mannerd watchmaker seemingly sells himself out and follows the order. His reason? He has been secretly sheltering a dozen Jewish children and must go on living so that they may survive. Stunningly directed by Zoltan Fabri and photographed by the dean of Hungarian cinematographers, Gyorgy Illes

"A SPECIAL DAY" (Italy)-Sophia Loren and Marcello Mastroianni reaffirm their stature as international stars by essaying totally deglamorized roles in a tender and touching off-beat story. She is a dowdy (if you can believe it) housewife and he a homosexual (if you can believe that) who live in the same apartment block, but meet only when everyone else troops off to attend a monster Mussolini rally. They spend the day together and, in that simple fleeting interlude, change each others' lives. A tour de force of acting by both stars.

"BLACK LITTER" (Spain)-This most unusual film is centered about the activities of an extreme right-wing terrorist group led by a kind of radical Mother Courage who has more cojones than all of the men put together. It is highlighted by an incredibly powerful performance by 15-year-old Jose Luis Alonso in the lead role of the younger brother who is itching to get his share of the action and become a "man". In the chilling climactic sequence, when poised to seduce an all-too-willing waitress, he instead picks up a rock and smashes her head, while chanting "Spain! Spain!".

The Australian film offered in competition, "THE LAST WAVE", is shown late in the Festival and, even though by then almost surfeited with my reactions to the parade of excellent films seen, I am stunned by its power. Starring American actor Richard Chamberlain in the role of a successful young Sydney lawyer assigned to defend a group of aborigines in a murder trial, the film early on creates an air of almost surrealistic mystery. It is not a matter of whodunit-but why they did it. In the course of answering the provocative question, the audience is skillfully led through a labyrinth of puzzling events, including a violent desert storm of egg-size hailstones falling from a cloudless sky, an apocalyptic vision of Sydney under water (with shopping bags and eerie corpses floating by) and a glowing apparition of a young aborigine





#### HOLLYWOOD'S OLDEST FILM SCHOOL

NOW ACCEPTING ENROLLMENTS FOR OUR NEXT

#### **MOTION PICTURE COURSE**

CAMERAS . SOUND RECORDING LIGHTING . EDITING . EFFECTS COMPOSITION . SCRIPTING . ETC.

Two Week Courses-

**Evening Classes** 

#### DANNY ROUZER STUDIO

7022 Melrose Avenue, Hollywood, California 90038 Request Brochure HC (213) 936-2494

Atlanta Film Equipment Rentals



1848 Briarwood Rd., NE, Atlanta, Ga. 30329 404/325-3676 Send for AFER'S rental catalog.

#### **AUTOMATIC DAYLIGHT PROCESSOR**

Processes up to 200 Ft.
Super 8 to 105mm
Movie—X-Ray • Microfilm
Motor Driven—Portable
Film Dryers Available
Guaranteed

Write for Free Literature OUR 31st YEAR

Micro Record Corp. 487-14 South Ave., Beacon, N.Y. 12508

**PORTABLE STEREO** RECORDERS

by

**UHERS** JVC SONY

**MICROPHONES** AVAII ARI F by SENNHEISER AND AKG

Pearlcorder

#### CARPENTER SALES

P.O. BOX 1321, 939 PARK AVE. **MEADVILLE, PA 16335** 814/724-4156





1085 St. Alexander St., Montreal, Quebec FILM LABS Telephone (514) 861-5483



Contact Jim Grattan for top equipped crews. Single and double system.

Montreal H3Z 1S3, P. Q. Canada PRODUCTIONS (514) 932-1463

#### CANADA'S LARGEST

LAB AND SOUND **FULL SERVICE ORGANIZATION** 



2000 Northcliffe Ave. 720 King St. West 121 St. Montreal, Que. H4A 3K5 Toronto, Ont. M5v 273 Toronto, 121 St. 434, 3484 Toronto, Ont. M5v 273 Toronto, Ont

A DIVISION OF ASTRAL BELLEVUE PATHÉ LTD./LTEE

#### UNDERWATER

If you're looking for the most creative, experienced, hardest working, knowledgeable, budget-wise, well-equipped, dynamic and competent cinematographer

YOU'VE JUST FOUND THE BEST.

35mm only, spherical & anamorphic (especially Panavision)

I care enough to develop and own my own equipment.

**ALAN GORNICK, JR.** 

DIRECTOR OF PHOTOGRAPHY, IATSE 659

(213) 223-8914

4200 Camino Real, Los Angeles, CA 90065

### **Editing Facilities Equipment Rental**

Kems, Steenbecks & Moviolas

1600 BROADWAY, NEW YORK, N.Y. 10019 (212) 246-0865

#### THE FIVE C'S OF CINEMATOGRAPHY Seventh Printing ..... \$15 Postpaid MASCELLI'S CINE WORKBOOK

Incredible Value ..... \$20 Postpaid Calif. add 6% Tax. Foreign add \$1 per book. 10-Day Trial Offer! Free Brochures! Oine/Grafic, Box 430, Hollywood, CA 90028 USA holding out a strangely carved stone. In the storm drains beneath the city, the lawyer finally uncovers the awesome secret which the aborigines he is defending preserve by murder.

Heavy stuff-but totally fascinating. Chamberlain has never been better on the screen, and the young aboriginal actor, David Gulpilil, who made such an auspicious debut as the ill-fated teenager in "WALKABOUT", proves once again that he is an extraordinary screen personality. Direction by Peter Weir and photography by Russell Boyd are inspired, proving that their "PICNIC AT HANGING ROCK" (produced also by Hal and James McElroy) was certainly no fluke.

When my friend, Mehrdad Azarmi, asks me just prior to the Awards Ceremony which picture I think should win, I unhesitatingly (and with absolutely no "inside" information) reply: "THE LAST WAVE".

At the glittering closing ceremony in Rudaki Hall, the awards are presented, as is the custom, by Her Majesty, Empress Farah Pahlavi, gracious patroness of the Festival.

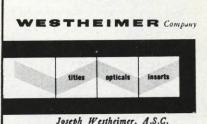
It comes as no surprise to me that "THE LAST WAVE" does, indeed win the Golden Ibex top award. On the personal level, I am delighted, having met and gotten to know the McElroys, Director Weir and Cinematographer Boyd during my last trip to Australia (see American Cinematographer, September, 1976).

Once more the Tehran International Film Festival has drawn to a close and, in my opinion, it has been one of the bestorganized and smoothest-running events of its kind that I've ever experienced. Whatever problems may have existed in past years have been solved with style and efficiency. Everyone involved is to be congratulated, and especially Houshang Shafti, who, having taken over very late in the day as Managing Director, did a magnificent job of bringing it all together.

#### "THE ICEMAN COMETH" Continued from Page 177

ing through the camera with the image to him turned 90 degrees. With the Panaflex it's a lot easier, because the evepiece tube can be rotated for convenient viewing, even from the front if necessary. I still use the tracking mount for low-clearance shots. It's much easier to get the operator positioned where he can do the work. I have even used it with closed-circuit viewing for shots like a motorcycle which ran toward and went under the crane-mounted camera. By tilting with the action, we ended with an





Joseph Westheimer. A.S.C. TITLES, TRAILERS, INSERTS AND OPTICAL EFFECTS FOR MOTION PICTURES AND TELEVISION HO 6-8271 736 Seward St., Hollywood, Calif. 90038



**PROFESSIONAL** UNDERWATER **PHOTOGRAPHY** 

Al Giddings Enterprise 12812 Skyline Blvd.

(415) 530-1122

Oakland, CA 94619

SHOOTING IN ISRAEL CONTACT ELJAC

camera and sound equipment, lights, vehicles, crew

telex: rofe 341-926

21 jabotinsky st. ierusalem

#### **CP and FREZZOLINI CORDLESS CAMERAS**

COMPLETE OUTFITS used, reconditioned \$2795 up Includes Ang. 12/120 Zoom lens, magnetic recording head, amplifier, 400' magazine, battery.

# PHOTOMART CINE EQUIPMENT SUPPLIERS

S. ORANGE AVE., • ORLANDO, FLA. 32809

Phone (305) 851-2780

Repairs and Service NPR — ACL

All Work Guaranteed

Ecam Company 1430 N. Cahuenga Blvd. Hollywood, CA 90028 Telephone: (213) 466-7301

## **BLOW-UP**

HIGH QUALITY
35MM NEGATIVES
FROM YOUR 16MM ORIGINALS

Stock Shots Enlarged to Match-in with your 35mm Negative Complete Pictures Transferred to 35mm

Call-Adrian at (213) 463-3178

#### CINESERVICE, INC.

1459 North Seward Street Hollywood, California 90028

# CALL A PROFESSIONAL Cine-Craft, Inc.

A full service laboratory for 16mm, Super 8, Regular 8 Any quantity Best prices

8764 Beverly Blvd., Hollywood, Calif. 90048 (213) 652-7357 Write for free brochure



ASIAN FILMS
72. JANPATH, N. DELHI-1
Cable: Moviphoto,
New Delhi (India);
Telephone: 44040

EDITING CONSOLES

35mm, 16mm



For literature call, day or night: (800) 821-7700 ext. 815 In Missouri call: (800) 892-7655

For other information please contact:

Twenty-Fourth Frame p.o. box 539, blacksburg, va. 24060 (703) 382-4135,



(216) 881-4510

4117 Prospect Ave. Cleveland, Ohio 44103

upside-down bike going away. (And there I sat on the side of the mount and rotated it, using a reflex closed-circuit TV to watch the scene.) We've used it often to turn the camera upside-down where we wanted a scene shot in reverse action. You know, the old homemovie trick. You turn the camera upside down and the scene comes out backwards. You'd be amazed at how many people will come over to kibbitz if you're doing such a shot. Recently in a picture, a woman on a hospital gurney is supposed to crash into the front end of a car as a gag. Rather than have her actually crash, we did it backwards. We pulled her away and did every other action in reverse. People always gather around and ask, "Hey, what's the camera upside down for?" (It's because we avoid an optical, and can view a print tomorrow to see how it looked.) They'll get out a piece of paper, figuring this out. How the hell is it going to work? Isn't it going to put the sound track on the wrong side? All sorts of very abstruse arguments come out of it. Once we had a shot where a guy was in a crash and the car was turned upside-down. There he is, hanging upside-down. The director wanted the victim's P.O.V. of a cop standing alongside, so we turned the camera upside-down and lined up a shot of the cop whom we placed up on a parallel. The director came over to check through the upside-down camera. He said, "Hell, he's still right-side

To be continued

up."

## **MOVING?**

PLEASE NOTIFY US 6 WEEKS IN ADVANCE

State

Miss/Mrs./Mr. Name (please print)

New Address

Apt. No.

Zip

City

MAIL TO AMERICAN

AMERICAN CINEMATOGRAPHER

P.O. Box 2230 Hollywood, Ca.

Hollywood, Ca 90028

ATTACH LABEL HERE for address change or inquiry. If you are receiving duplicate copies of AMERICAN CINEMATOGRAPHER, please send both labels. If moving, list new address above.

SUPER 8-16 STUDIOS

1 LABORATORY SERVICES

2 EQUIPMENT & SALES

3 PRODUCTION DEPARTMENT

4 FILM LIBRARY RENTALS
5 EQUIPMENT RENTALS

SEND FOR NEW PRICE LIST

230 Hyde St. San Francisco, Ca. 94102 [415] 885-0881

Let the PBO'S tell you How to Buy a 16mm Sound Projector

FREE

We will send you the article which appeared in

FILMMAKERS NEWSLETTER on buying a "Used Projector."

HECHT - Box 443 - Ellenville, NY 12428







PHOTOMART CINE EQUIPMENT SUPPLIERS 6327 S. ORANGE AVE. • ORLANDO, FLA. 32809

Phone (305) 851-2780

#### BEHIND-THE-LENS FILTER HOLDERS

For Angenieux lenses on all Arriflex 16, Eclair NPR and CM3 cameras, and for the 25-250 Angenieux for 35 mm - - in kits with gel cutter, tweezer, spare gel container and other convenience features.

Ask for brochures

CUSTOM PHOTOGRAPHICS

P. O. Box 25007, Portland, Oregon 97225 • 503-292-556

# BUY - SELL - SWAP HERE

#### STUDIO PRODUCTION EQUIPMENT

10mm f1.8 "C" retrofocus, new \$225. New GAF Model 3000S proj., \$200. Beaulieu R16T — 17-68 Z kit, mint, \$1,175. Canon 16M underwater kit with Halliburton case, \$235. Dolflex kit, wild motor, 10mm f1.8, 25mm f1.4 & f2.8 Schneider lens \$1,185. Most all "S" & "C" mount fixed lens plus many zooms, call or write for price. MOVIE SHOP, 6540 E. 21st, Tulsa, OK 74129 (918) 835-9941.

AKG shotgun mike complete (9B46E-CK 9) and windscreen \$125. BOB DENNIE, 4401 Laudun St., Metairie, LA 70002 (504) 454-0010 or 568-5855.

UHER 4400 stereo; mic; nicads, charger; case-very good, \$350. Schneider 16mm, f1.4 Cinegon-Arri, \$175. Schneider 75mm, Xenon f2-Arri \$175. 300mm f5.6 Kilar; C mount; mint \$130. GREG LOWE, 2560 Buchanan, Ogden, UT 84401 (801) 392-7449.

FRENCH ECLAIR ACL, 24 fps XTL, 2-200 ft magazines, HIP/BAP/ZAP, cable, grip, case. Whole package excellent condition, meticulously maintained, \$4,300. R. E. STOUT, (614) 587-0364.

400 ft. Auricon complete sound outfit. Camera, magazine, MA-11 Filmagnetic amplifier and head, Angenieux 12-120 lens, \$2,195. 90-day warranty on all. Arri 16BL, 12-120, Jensen Crystal, case, 1 magazine, recently overhauled, \$7,295. GORDON YODER (214) 357-3045.

ARRIFLEX 16mm BL, 3/400' magazine, 12-120 Ang. battery, case, fully recondition \$8,950. ECLAIR FRENCH NPR 2/400' split plate magazines, Perfectone motor w/crystal control, case, battery, standard eyepiece. Excellent .....\$8,950 BEAULIEU R-16 w/12-120 Angenieux, handle adapter, battery, charger, case. Excellent ...\$2,250 BEAULIEU R-16 w/15mm f/1.3,50mm f/1.5,75mm

PACILED R-16W/15IIII/17.3, 30IIIII/17.3, 30IIIII/17.3, 30IIIIII/17.3, 30IIIII/17.3, 30IIIII/17.3, 30IIIII/17.3, 30IIIII/17.3, 30IIIII/17.3, 30IIIII/17.3, 30IIIII/17.3, 30IIIII/17.3, 30IIIII/17.3, 30IIII/17.3, 30IIIII/17.3, 30IIII/17.3, 30IIII/17.3, 30IIII/17.3, 30IIII/17.3, 30IIII/17.3, 30IIII/17.3, 30IIII/17.3, 30IIII/17.3, 30IIII/17.3, 30I

ZEISS: 10 to 100mm zoom lens never a rental unit. Complete W/CPD zoom bracket and filter, adapter, \$1,475. Call (800) 521-2032 ask for TOM.

Call Marvin Stone or Bill Sutphin.

ARRIFLEX 16M, 12-120 Angenieux zoom, three prime lenses, 200' and 400' mags., two motors and batteries, NAGRA III, Synchronizer, Palmer interlock projector, 16mm Magnasync recorder, editing equipment, tripods, lights, etc., \$10,500 or best offer. MELVIN A. HUNTER, 7365 W. Jefferson, Hesperia, MI (616) 854-1797.

ARRI 16BL, 10-100 Zeiss lens, Apex Exposure system, 3 magazines, 2 batteries, matte box, remote control switch, Arri crystal precision motor control, magazine, barney, rain barney, Halliburton case, New \$23,000, Excellent Condition, \$9,500. ARRI SONOREX 16 double system interlock projector w/Sonorex speaker. Current list price \$5600, like new, \$3,200. BEAULIEU R16 Auto, 12-120 Angenieux lens, automatic exposure, 200 ft. magazine, 2 1000 mA batteries, 2 chargers, Halliburton case, \$2,200. WOLFGANG BAYER PRODUCTIONS INC., Box 915, Jackson Hole, Wyoming (307) 733-6590.

VANGUARD motion viewer/analyzer—New Air Force Surplus, \$1500. 16mm — 100', 70mm — 1000', Unused. Commercial price, \$7000. GENERAL SUPPLY, Box 14628, Houston, TX 77021 (713) 748-3350.

MAGNA-TECH 92B playback resolver, excellent condition. \$650. CHICAGO AUDIO WORKS (312) 527-3105.

NPR, new Alcon crystal, 2-400' mag., 9-95 Angenieux, battery, barney, brace. Uher 1000. (617) 924-0665, Eve.

#### STUDIO PRODUCTION EQUIPMENT

REFLEX TV including door for an Arri IIC, 2 monitors and PP, asking price \$2,975. (213) 846-1766.

B&H Pedestal foot splicers, 16mm A&B or 16/35, completely rebuilt, metallic blue finish \$1600. CINE-MA SOUND LTD. (703) 524-1083.

FAX Animation crane; Bolex R5, 26mm Macro-Switar lens, Slo-syn stop motion unit, back light, Acme punch, Richardson N-S peg movement. Call (213) 654-9193.

STEENBECK ST 900W 6-plate flatbed. For Sale: \$7500. Or lease on yearly contract: \$500 per month. Purchased new in 1970. Mint condition. Low mileage. Pampered by one owner. Good alone or as slave to compatible units. Call or write (312) 644-7444.

25-250 zooms, new condition, just overhauled, Arri "S" or CP16R mount, \$3500. CINEMA SOUND LTD., (703) 524-1083.

ARRIFLEX SB with sync generator, Zelss 10-100mm zoom lens, 3 mags, 2 torque motors, constant and VS motors, accessories, \$3000. Call (212)255-5575.

ECLAIR NPR PACKAGE w/Alsa Crystal motor (new). 2x400 ft. magazines, 9.5-95mm Angenleux w/zoom motor, 4½" filters, 25mm f.95 Angenleux, 2/Cine-60 battery belts (newly covered), O'Conner 100-B fluid head, Mitchell legs (regular & baby), hihat, 3-wheel dolly, clip-ons. SUMAC PRODUCTIONS (213) 461-1955.

BARGAINS ON USED MITCHELL EQUIPMENT . 65mm Reflex Camera outfit, finest 65mm available. Mitchell 35mm Standard bodies, \$1250. Animation motors for Mitchell 35 & 16, \$1050. Mitchell 65mm mags 400 ft and 1000 ft. Wall 35 Camera w/built-in animation motor, \$2500. Arri 16BL outfit, like new \$10,500. Arri 35mm Techniscope \$2250. Mitchell 16mm outfit, \$2750. 65mm 3-D Camera Outfit available for Rental — many More Unusual Items Available. LLOYD'S CAMERA EXCHANGE, 1612 Cahuenga Blvd., Hollywood, CA 90028.

ARRI "S" w/2 400' mags, torque motor, wild motor, A/C sync motor, matte box, 25mm lens, Pan Cinor 17-85 zoom, pistol grip, mint condition, \$3700. CINEMA SOUND LTD. (703) 524-1083.

SYNC BEEP — 1/4 inch tape prerecorded with high-level 1000 Hz tone, backed with special pressure-sensitive adhesive for quickly affixing visual and audible sync indication on any magnetic film or tape. Industry-wide acceptance. Send \$2.50 cash, check or money order for prepaid packet containing 20 strips totaling 100 35mm frames, D.P. UPTON CO., P.O. Box 5052, Tucson, AZ 85703.

#### **SUPPLIES**

BLACK LEADER, 16mm, fresh stock processed to 4.0+, guaranteed \$.026/ft, min order 2000 ft, complete lab service and supplies. 16mm & Super-8. LEO DINER FILMS INC., 350 Golden Gate Ave., San Francisco, 94102 (415) 775-3664.

#### RENTALS

KEM rentals in Hollywood. HORIZONTAL EDITING STUDIOS (213) 461-4643.

35mm Interlock MP-30MB for feature film screenings on location. \$600 per month plus freight and insurance. Contact LAUMIC CO., INC., at 306 East 39th St., New York, NY 10016, (212) 889-3300.

CINEMONTA/STEENBECK RENTALS, 8-plate, 16/35mm delivered to your premises. KLM ASSOC., INC., West Coast (213) 931-6151 East Coast (301) 299-7259.

HOLLYWOOD cutting rooms & editing equipment rentals at bargain rates. Also complete editorial services. CRAWFORD EDITORIAL.. (213) 463-7939.

We are your 16mm Arriflex dealer and rental source in St. Louis. SCHILLERS, 9240 Manchester Rd., (314) 968-3650.

#### WANTED

WANT TO SELL YOUR EQUIPMENT?
Call Marvin Stone or Bill Sutphin at Birns & Sawyer, Inc. We need all kinds of motion picture equipment
— Nagra Ill recorders (any condition), lighting (any type), Angenieux zoom Ienses, etc. Let us know what you have. We pay top prices. Call (213) 466-8211 or come in. BIRNS & SAWYER, INC., 1026 N. Highland Ave., Hollywood, CA 90038.

6-PLATE STEENBECK in good operating condition. SHERIDON-ELSON COMMUNICATIONS, 355 Lexington Ave., New York, NY 10017, (212) 661-0500.

TRADE CASH for 16mm equipment: Cameras, sound recording, editorial, etc. (213) 461-3711.

WANTED: Auricon Cinevoice cameras, CM-72A, converted or unconverted, any condition. Best prices. Call (201) 427-1160 or (212) 594-2294.

RACCOON color shots needed, 16mm 7252-7242 preferred. Mother, baby, swimming, night, also Panda, small Panda, Coati. Send description and price. PIERRE SAMUEL RIOUX, 506 Church (RR2), Cowansville, Que., Canada. J2K-3G7.

RAW STOCK FILM NEEDED. Highest cash paid for 16 or 35mm color negative or reversal film including any EF (7240) mag. stripe. FILMEX (filmbrokers) (416) 964-7415 collect.

B&H Filmo standard 8mm, 400 ft. or greater projector. BUERGER, 135 Lindero Ave., Long Beach, CA 90803.

RAW FILM STOCK. Will consider all 16/35mm types. Sealed, opened and ends. RAFIK, 814 Broadway, NY 10003 (212) 473-5851 collect.

WANTED: Professional motion picture equipment, 16mm and 35mm, cameras, lenses, lights, sound, editing, projection, lab, for outright purchase or consignment. Supply complete technical description and price for immediate reply. Ted Lane, ALAN GORDON ENTERPRISES INC., 1430 Cahuenga, Hollywood, CA 90028, (213) 466-3561.

#### SERVICES AVAILABLE

CONSOLE editing table, 8-plate 16mm with additional facilities available 24 hours/day. Editor available, W. Hollywood, (213) 874-9819.

ARRIFLEX, Eclair, Angenieux service and repair, modifications, mounts, lens repairs, collimation, through the lens projections. STEENBECK, sales and service. HERMAN GALLI CAMERA SERVICE, 6804 Melrose Ave., Hollywood, CA 90038 (213) 931-4111.

BEAULIEU cameras equipped with digital sync output. 4008ZM2, 4008ZM4, 3008S, 5008S, R-16B @ \$69. 7-day service. THE FILM GROUP, Box 9, Wethersfield, CT 06109. (203) 563-2574/529-5531.

Z&A for quality repairs of Arris and Eclairs. Z&A SERVICE, 9707 W. Washington Blvd., Culver City, CA 90230. (213) 836-3194.

B&H Filmos slotted w/2 holders \$52.50. 3 day service. GORDON YODER, INC., 2911 Ladybird Lane, Dallas, TX 75220.

3/4" VIDEOTAPE editing system, offline/mastering, HORIZONTAL EDITING STUDIOS, Hollywood, CA (213) 461-4643.

IN-HOUSE repairs of Bolex, Canon, Auricon, Bell & Howell, SS Ills, CP-16 and table viewers. GORDON YODER, INC., 2911 Ladybird Lane, Dallas, TX 75220.

EXPERT REPAIRS and overhauls on all editing accessories, splicers, synchronizers, viewers, etc. Write or call THE EDITING MACHINE INC., 630 Ninth Ave., New York, NY 10036 (212) 757-5420.

QUALITY optical repair, Film & Video. Angenieux, Canon, Zeiss, Etc. Z&A SERVICE, 9707 W. Washington Blvd., Culver City, CA 90230 (213) 836-3194.

CALL us for your "ODDBALL" service work. GOR-DON YODER, INC., (214) 357-3045.

RATES: Ads set in lightface type 50¢ per word. Minimum ad, \$5.00. Text set in lightface capital letters (except 1st word and advertiser's name) 60¢ per word. Modified display format (text set in **boldface** type, capitals or upper and lower case) \$5.00 per line. Send copy with remittance to covepayment to Editorial Office, American Cinematographer, P. O. Box 2230, Hollywood California 90028. Forms close 1st of month preceding date of issue.

#### MISCELLANEOUS

CAMERA CAR BUSINESS, comprised of one Chevrolet insert, camera car, one Ford crane camera car, one nine passenger Chevrolet wagon with platforms, one custom built "process trailer", FM walkie-talkies. Everything is absolutely immaculate. Owned and built by Jon Ward. All vehicles are air conditioned and equipped with every piece of adaptation needed from risers to vehicle tow bar, Call SUNNY at (213) 846-1766.

OPTICAL EFFECTS, animation, artwork, matte paintings, 16/35. Write FX, 155 N. El Camino, San Mateo, CA 94401.

BUSINESS FOR SALE. Mail order sales of professional filmmaking and video equipment. Well established, profitable, only two people operate, can be relocated anywhere. Total price \$75,000, needs \$25,000 cash down, balance on terms. Call (201) 444-8811.

16mm and Super 8 sound films. Roy Rogers, Wayne, etc. 50¢ for catalog. NOSTALGIA MER-CHANT, Dept. AC, Suite #1019, Hollywood, CA 90028.

HIGHLY PROFITABLE FILM BUSINESS for sale, including 7 Steenbecks and sound equipment. Established over 10 years. Some long term contracts. Write to: J. VANDERMAY, 41 South Marine Drive, Scarborough, Ontario, Canada M1E 1

HOW TO WRITE EDUCATIONAL AND TECHNICAL FILMS. A sample script that tells and shows you how, with a humorous, illustrated glossary of the terms you need to know. \$3.95, plus \$1.00 postage and handling. Free details. HOYT, Box 1070, Dept. A-C, Lawrence, KS 66044.

#### SITUATION WANTED

FILMMAKER through client approval first answer print. Resume and reel available. BOB KITCHIN, 38 West Sierra Madre Blvd., #30, Sierra Madre, CA 91024. (213) 355-8568.

HELP! I do not have an uncle in the industry, that's why I'm running this ad. Creative and hardworking young man seeks entry level position in film/television production. Willing to relocate. Please write LEE RICHARDSON, 489 Remsens Lane, Oyster Bay, NY 11771 for resume. (516) 922-3054.

#### SITUATIONS AVAILABLE

Two tenure-track cinema positions; assistant professor level, fall, 1978, in production and theory courses. Teaching experience desirable, broad background of first-hand professional documentary experience essential. Doctorate preferred. Washington State University is an equal opportunity/affirmative action employer; minority, handicapped and women applicants are encouraged to identify themselves as such. Each applicant should send vita and three letters of recommendation to Thomas Heuterman, WSU Department of Communications, Pullman, WA 99164. Review begins Feb. 1, 1978.

Established progressive motion picture laboratory is now looking for experienced goal oriented lab personnel to aid in further expansion. Management experience helpful but not required. Send resume to WRS, INC., 210 Semple St., Pittsburgh, PA 15213 Attn: Mr. Thomas.

PROFESSIONAL CAMERA REPAIR TECHNI-CIANS, Victor Duncan, Inc. has openings in Chicago and Detroit for professional camera repair technicians. Interested applicants should have a practical background in camera mechanics and optics. VDI offers a complete employee benefit package and excellent working conditions. Salary commensurate with experience. Call Bob Coleman collect in Chicago, (312) 321-9406 or Bob Burrell collect in Detroit, (313) 371-4920.



### T-Shirts for Filmmakers

Twenty-one popular professional film equipment designs. Write for free brochure.

#### alan gordon enterprises inc.

Dept. TS

1430 N. Cahuenga Bivd., Hollywood, CA 90028 Telephone: (213) 466-3561 • (213) 985-5500 TWX: 910-321-4526 • Cable: GORDENT

# This Publication....



# is Available in MICROFORM

For Complete Information WRITE:

University Microfilms International

Dept. F.A. 300 North Zeeb Road Ann Arbor, MI 48106 Dept. F.A. 18 Bedford Row London, WC1R 4EJ England

#### QUESTIONS & ANSWERS Continued from Page 124

What kind of lens aberration would cause this intriguing effect? Also, the depth-of-field was so limited in some scenes that I wondered if only minimal lighting units were employed and the shots made with the diaphragm wide open?

A I used my favorite Harrison & Harrison fog filters throughout the entire film to make bright lights appear brighter. Fog filters tend to flare out the highlights without affecting the overall sharpness of the image. Our eyes experience the same kind of effect; for example, walking at night, we would see the bright automobile headlights "flaring" against the dark background.

Many times during filming we encountered the situation where I wanted to capture the "real" feeling of a place which was also very underlit. The air traffic control center, shot on actual location, was lit with hardly more than five or six inky-dinkies and even pushing the film to the limit we had to use Panavision's high-speed lenses almost wide-open at T:1.7. The limited depthof-field adds to the reality of this particular scene, some other times it could be disturbing. It is always the cameraman's judgment when to use this technique. Vilmos Zsigmond

# Cinematographer



American Cinematographer

Please enter my new subscription for 1 year—\$9.00 U.S. \$10.00 Foreign

and send me a free copy of the Four-In-One Rep

Four-In-One Reprint.
I am enclosing

my remittance.

with remittance)

P.O. Box 2230 Hollywood, CA 90028

\_\_\_\_

Address

City

m in the second

\_ Sta

Zip



VIBRATION ISOLATION HELICOPTER CAMERA MOUNTS FOR 16/35/70 mm AND TV PHOTOGRAPHY

Hollywood 213-989-4420 — San Francisco — 415-864-4644 — Toronto 416-920-5424 — New York 212-431-3930 Miami 305-757-5988 — St. Louis 314-421-5440 — Boston 617-266-7468 — Denver 303-777-7699 Atlanta 404-451-4624 — London 01-452-8090 — Paris 328-5830 — Sydney 428-5300

Send for brochure — Tyler Camera Systems, 14218 Aetna Street, Van Nuys, California 91401 U.S.A.

**HELICOPTERS** 

**CAMERAMEN** 

CAMERA PILOTS

# **FREZZOLINI®** 16mm cameras-\*FIRST with **Documentary FILMAKERS.**

FREZZI-FLEX® FR-16

### REZZI-CORDLESS. LW-16

now shooting documentaries, educational features, business shorts & TV newsfilm world-wide.



For information and nearest dealer call Jim Crawford at (N.J.201)427-1160 or (N.Y.C.212) 594-2294 Frezzolini Electronics Inc 7 Valley St., Hawthorne, N.J. 07506 US



11 Caesar Place, Moonachie, New Jersey 07074 U.S.A. Telephone: (201) 939-0875 • Cables: Cinecraft Moonachie, N.J. USA Telex: Cinecraft Moon TLX 13-8865

Made In U.S.A U.S. Patent #D277,601 and **Patents Pending** for the improved features of this camera. Patent and trademarks in the U.S.A. and world-wide

T-N-99/99-0001-MEMBER 008-007-90038-00112 ALLAN L. WILLIAMS EASTMAN KUDAK COMPANY 6706 SANTA MONICA BLVD. HCLLYWCCD, CA 90038

# When it comes to meeting all the demands of today's producers, most film labs can't.

Superior film processing and printing will always be Number One at Byron. But producers need more. They need as many first-class professional services in one facility as is possible. It makes sense. It's easier to maintain quality control when everything is under one roof.

At Byron Motion Pictures you'll find two top-notch narration studios, complete with mix and looping facilities for film and video tape.

Three screening rooms one being a sophisticated mixing theatre and another which can handle a cinemascope feature for an audience of 50. Two elaborate conference rooms. Five fully-equipped editing rooms. Three fabulous music and effects libraries. And more.

Twenty-four-at-a-time video cassette duplication capabilities.

Film-to-tape transfers from Super 8, 16 or 35mm. And, a very unique tape-to-film transfer process known as *Chromascan* <sup>™</sup>... unquestionably, a transfer process that is light years away from those old kinescopic methods.

Today's producers need

more than just a film lab from a film lab. That's why there's Byron.

The producer's laboratory.

#### SERVICES

PROCESSING & PRINTING OF 16MM, 35MM • SUPER 8MM PRINTING • COLOR NEGATIVE • ECO • EF • MS • VIDEO NEWS FILM • KODACHROME PRINTS • FILM-TO-TAPE TRANSFER • TAPE-TO-FILM TRANSFER (CHROMASCAN) • 1/2", 3/4", 1", 2" VIDEO TAPE • 3/4" CASSETTE DUPLICATION • NARRATION • MIXING • EDITING • SCREENING • CONSULTATION



65 K Street, Northeast Washington, D.C. 20002 202/783-2700 Professional Film and Video Tape Laboratories





(Above) Electrostatically-clean Negative Conforming Room

(Left) Sony Professional D-100 Video Tape Cassette Duplicators